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DRAFT
ENVIRONMENTAL IMPACT REPORT
PARK PROPERTIES
OAKLAND, CALIFORNIA

April 16, 1979
8102



City of Oakland
Oakland, California

DRAFT ENVIRONMENTAL IMPACT REPORT FOR:
PARK PROPERTIES, OAKLAND

California Environmental Quality Act (CEQA)

SUMMARY

A. GENERAL INFORMATION

Project Title: Park Properties, Oakland, California

Location: Castle Drive, Oakland

Project Sponsor: Park Properties

Address: 3810 Park Boulevard, Oakland, California 94602

B. PROJECT DESCRIPTION:

Construction of 29 single family residences on 11.2 acres in East Oakland. Site is zoned R-30, and designated Low Density. It is located in a steep-sided canyon.

C. SUMMARY OF ENVIRONMENTAL CONSEQUENCES OF THE PROJECT:

Geology, Soils, and Seismicity: A maximum of 300 to 500 cubic yards of balanced cut and fill would be required for grading for a roadway at the canyon floor. Downslope movement of surface soils could occur in the event of an earthquake along the Hayward Fault. Runoff would be increased slightly.

Traffic: Approximately 460 daily vehicle trips would be generated by the project. Traffic would use Ascot, Mountaingate, and Mountain Boulevard to reach Highway 13. Traffic would not result in streets or intersections operating above their capacity. The City of Oakland requires construction of curbs, gutters and sidewalks along streets in new developments. The eucalyptus trees along Castle Drive would have to be removed to accommodate this requirement. If the trees remained, sight distances from driveways would not be sufficient.

Vegetation: Minimum vegetation removal would take place; only in the areas where homes were to be located would existing vegetation be taken away. The eucalyptus trees along Castle Drive show evidence of sucker growth, which could become detached and fall.

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Health, Health Policy, and Law

Editor

Journal of Health Politics, Policy and Law

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Health and the Poor

John C. Scott, *University of Michigan* (in collaboration with Michael J. Katz, *University of Michigan*)

Health and the Law

John C. Scott, *University of Michigan* (in collaboration with Michael J. Katz, *University of Michigan*)

Noise: Construction noise would affect adjacent residences.

Community Services: Houses located more than 150 feet from roadways cannot be serviced by the Fire Department. The driveway to Lot 19 is 130 feet long.

D. POSSIBLE MITIGATION MEASURES TO MINIMIZE ANY ADVERSE EFFECTS OF THE PROJECT:

Geology, Soils and Seismicity: To limit surface runoff native vegetation would be planted. Geotechnical studies on a lot by lot basis would be prepared by a licensed geotechnical or civil engineer.

Traffic: If the trees along Castle Drive were not removed, safe sight distances could be accomplished by combined driveways along a common access road.

Vegetation: Tree removal permits would be required prior to removal of any trees on site.

Noise: Construction should be limited to normal working hours, and there should be no construction during weekends.

Community Services: The house on Lot 19 would have to be located within 20 feet of the driveway to be serviced by the Fire Department.

E. AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED:

1. City of Oakland

Planning Department

Marc Herbert, Assistant Director of Planning
Willie Yee, Assistant Planner

Department of Public Works

Vern Sullivan, Engineer

Police Department

Robert Nichelini, Aide, Oakland Chief of Police

Fire Department

Godwin Taylor, Fire Marshall
Robert Fyfe, Captain

2. Oakland Unified School District

Robert Long, Superintendent of Schools

3. Park Properties

John Sue, Landscape Architect

4. Concerned Citizens

Mr. and Mrs. Clyde C. Bohannan
6010 Castle Drive

Mr. George Lenahan
45 Castle Drive

Mr. and Mrs. Poulton
6131 Castle Drive

F. PUBLIC AGENCIES HAVING JURISDICTION BY LAW OVER THE PROJECT:

State of California (California Environmental Quality Act)
City of Oakland

G. PRELIMINARY DRAFT EIR PREPARED BY:

Environmental Impact Planning Corporation
319 Eleventh Street
San Francisco, California 94103

DATE COMPLETED: November 22, 1978

the following table, the
percentage of the total
population represented by

Percentage of population

residing in towns with less than
5000 inhabitants.

Residence of persons aged
50 years and over.

Residence of persons aged
65 years and over.

Residence of persons aged
50 years and over
and having a family income
of less than \$1000.

Percentage of population

residing in towns with less than
5000 inhabitants.

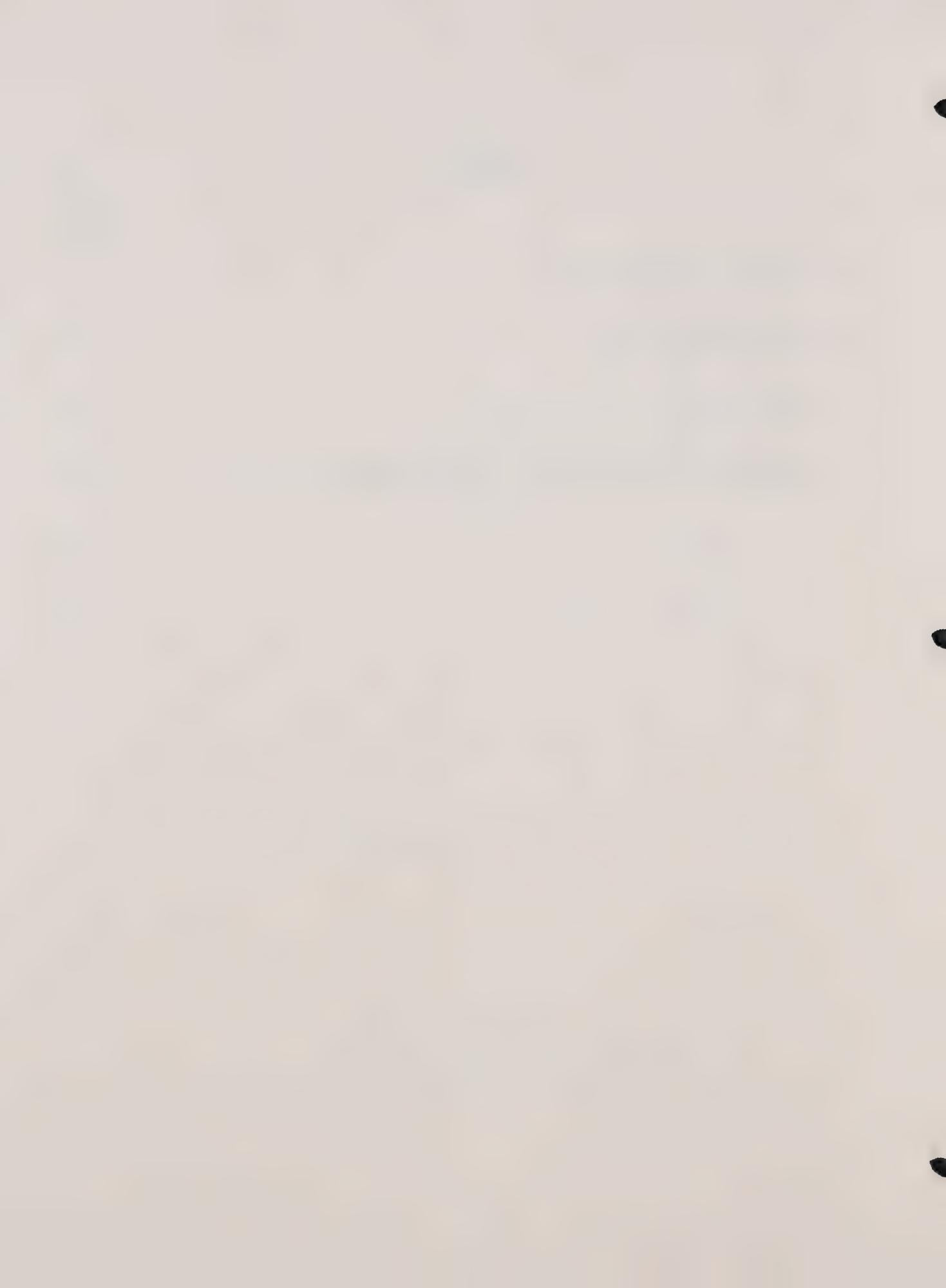
Residence of persons aged
65 years and over.

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SUMMARY

INTRODUCTION

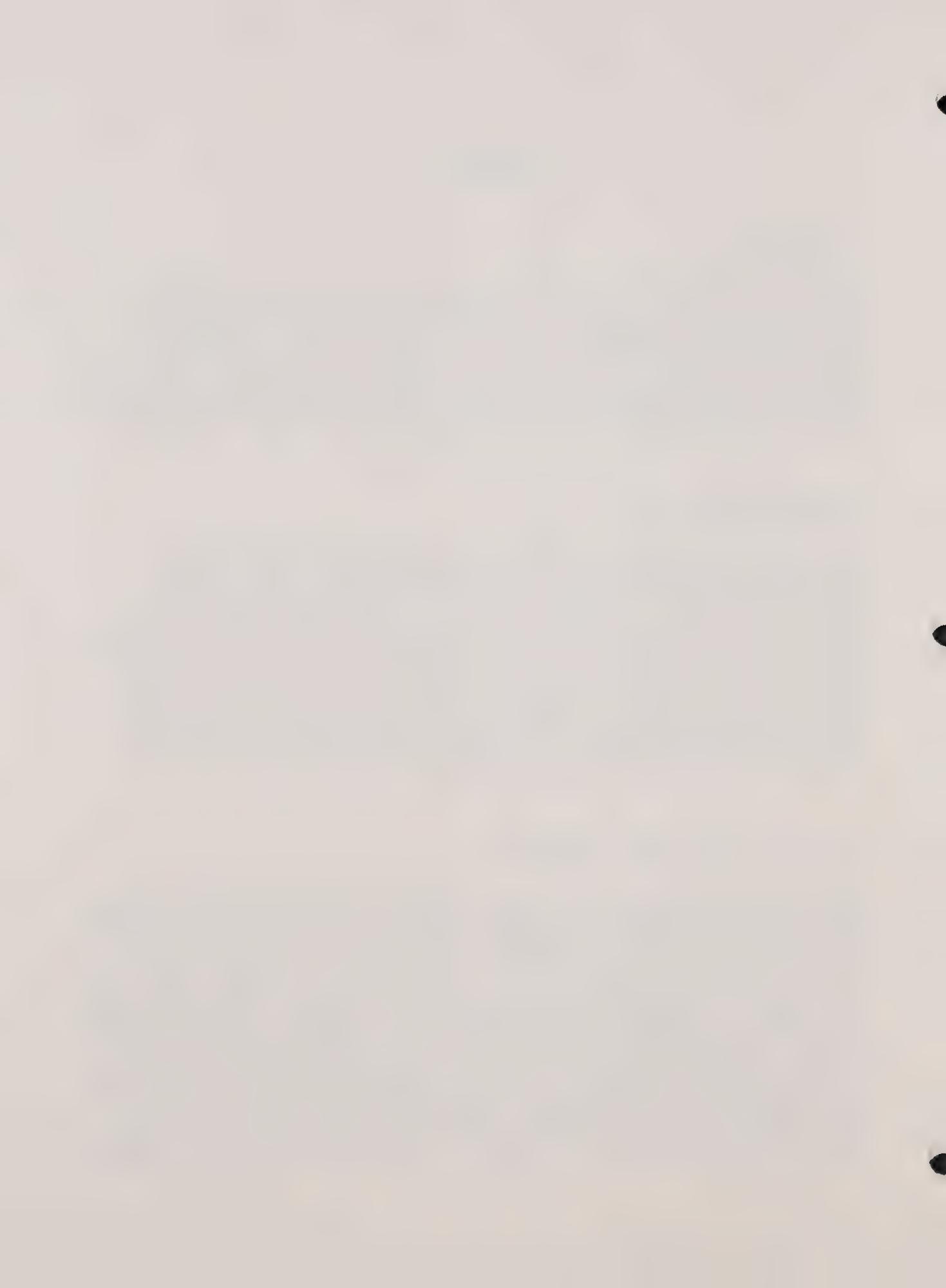
This environmental review has been prepared as a focused EIR in accordance with Section 15080 of the CEQA Guidelines. The Guidelines permit omission of a discussion of impacts found to be insignificant in the lead agency's initial environmental evaluation. This allows decision-makers to focus on the significant impacts from the project rather than being concerned with issues that would not be impacted by the project.

PROJECT DESCRIPTION

The proposed project consists of a development of 11.2 acres of land in East Oakland Hills for 29 single family dwelling units. The site is located in the East Oakland Hills, fronting on Castle Drive; it lies about 1,000 feet east of the Warren Freeway and is bordered by Joaquin Miller Park immediately to the east. The site consists of a steep sided canyon, where the north-facing slope is covered with larger trees, such as laurels, oaks, cypresses, and pines. Fronting the project site, along Castle Drive is a row of large eucalyptus trees. The site is zoned R-30 and designated as Low Density in the Oakland General Plan.

GEOLOGY, SOILS, AND SEISMICITY

No extensive grading has been proposed for the project, and only a minimum number of trees would be removed to accommodate the proposed homes. Therefore, the canyon slopes would only be disturbed to a small degree, resulting in little impact on the stability of the soils. The existing slopes show some evidence of instability. Erosion and soil creep can be aggravated by an increase in availability of water. Surface runoff would only increase slightly with the implementation of the project, as the major part of the site would remain vegetated with permeable surfaces. Along the canyon floor is the inactive Chabot Fault. Because it has been determined inactive, the possibility of movement along the fault during the lifetime of the project is unlikely. The proximity of the Hayward



Fault could impose a greater hazard to the site; in case of a seismic event along the Hayward Fault, ground-shaking could induce downslope movement of the surface soil.

TRAFFIC

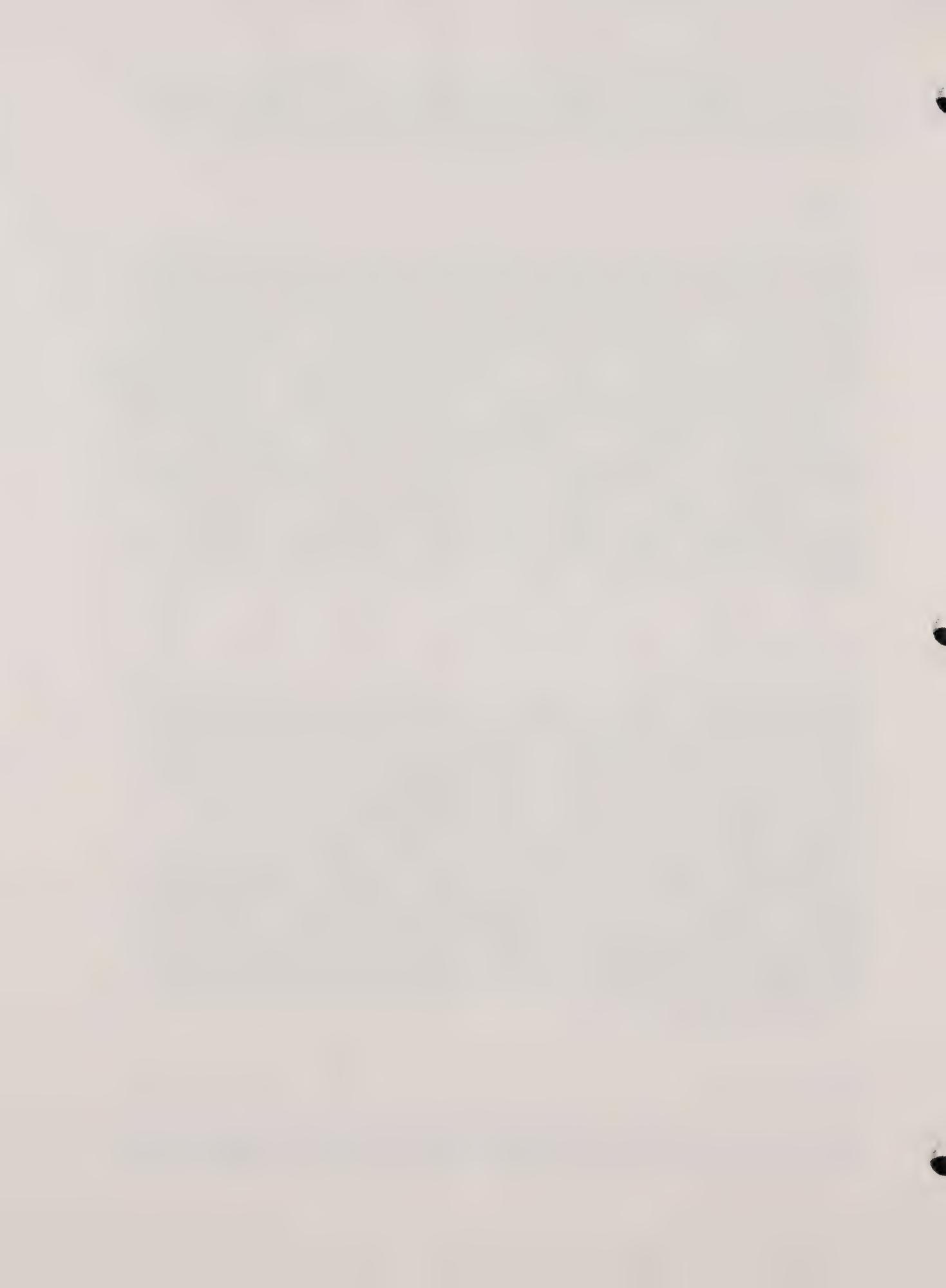
The proposed project would generate approximately 460 daily vehicle trips (assuming 16 trips per home), most of which would be to and from Highway 13. The homes fronting Castle Drive would most likely use Mountaingate Way to Ascot Drive, and homes on Cypressvale Lane would tend to use either Larry Lane or Mountaingate Way to reach Ascot Drive. The addition of project-generated vehicles on these roads would not result in the roads being used beyond their capacity. Increase in traffic vehicles due to the proposed project would not have a significant impact on Mastlands Drive. Improvement of Castle Drive in accordance with City of Oakland Ordinance 7971 would entail cutting down the eucalyptus trees lining the street. If the trees remained, they would act as a buffer between homes and traffic; if driveways were carefully located, sight distances would not be impaired by the trees.

VEGETATION

The major part of the vegetation cover on the site would remain following implementation of the proposed project. Trees and bushes would be removed only to accommodate the proposed homes, driveways, and Cypressvale Lane. The increase in human activity could result in some migration of the existing wildlife. The eucalyptus trees along Castle Drive have aesthetic value for the project site neighborhood, and in the section III.B. Traffic, a mitigation measure has been suggested that would minimize tree removal, based on careful location of driveways to proposed homes. However, the trees exhibit evidence of "sucker growth" or "water sprout limb," problems that would render the trees hazardous. From a safety standpoint, it could, therefore, be necessary to cut down the eucalyptus trees fronting Castle Drive.

NOISE

During construction of the proposed homes, truck and construction noise would increase noise levels at nearby homes.



COMMUNITY SERVICES

The Oakland Police Department patrols the project site and would be capable of accommodating the proposed project without an increase in equipment or manpower. Fire protection is provided by the Oakland Fire Department. The department can only serve lots located less than 150 feet from the nearest street. One lot in the proposed project is located 130 feet from the road, and positioning of a home would, therefore, be critical. The Oakland Unified School District currently has enrollment beyond its capacity, and the addition of students from the project would increase the existing burden on the District.

COMMUNITY CONCERNS

The community near the project site has been concerned primarily about the project-generated traffic volumes on the neighborhood streets, and the change in land use from open space to residential. The proposed project would increase the density of the community.

ALTERNATIVES

The no-project alternative would have the project site remain as open space. Leaving the site for open space or having reduced-density development would respond to community concerns.

SIGNIFICANT EFFECTS

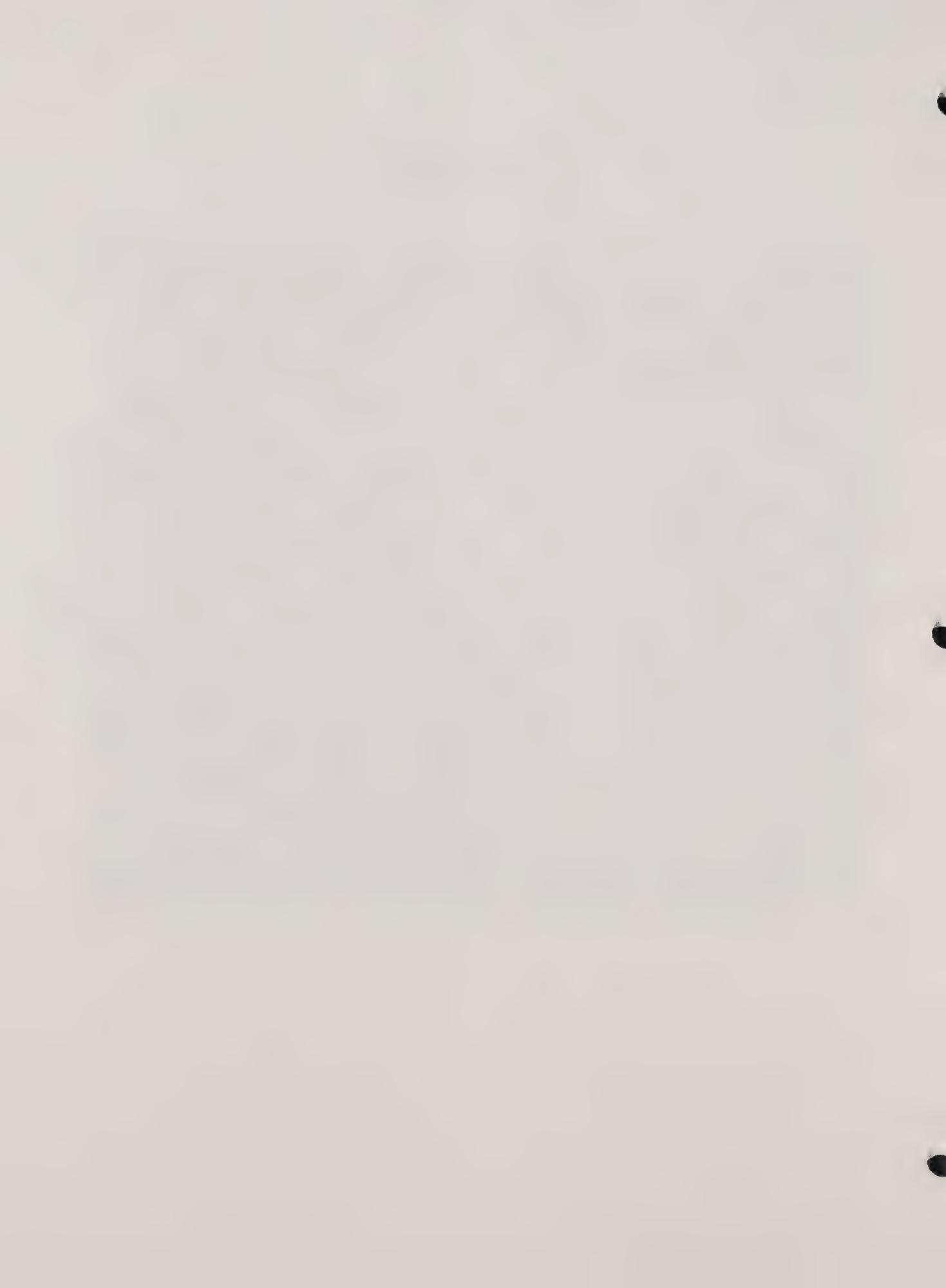
Significant vegetation, construction traffic, and noise impacts would result from implementation of the proposed project. In addition, seismic events along the Hayward Fault would pose a constraint on the proposed design of the project.

GROWTH-INDUCING IMPACTS

The proposed project would represent a growth-inducing influence on Eastern Oakland Hills.

I. INTRODUCTION

This report contains an analysis of the environmental impacts resulting from the proposed development of 11.2 acres for single-family housing in the hills of east Oakland. The report is prepared in accordance with the requirements of the California Environmental Quality Act (CEQA). The report is a focused environmental impact report, in accordance with Section 15080 of the CEQA Guidelines, as amended, Subsection (b, 3) and (d,3). This section permits omission of a discussion of impacts found to be insignificant, and allows the report to focus on potentially significant effects. This allows decision-makers to focus attention on significant impacts and dispenses with repetitious sections that describe the setting for areas where no impacts would occur. A focused EIR relies on the lead agency to determine in which areas significant impacts could occur and which areas would not be expected to be impacted. In order to specify the potentially significant effects, the City of Oakland Planning Department has completed an environmental review checklist (included in this report as Appendix A). The checklist determines that the proposed project would be constructed within one quarter mile of an earthquake fault, and that a change in drainage patterns of quantities of runoff would take place. Further, the checklist indicates that the proposed project may result in unstable earth conditions, and that the project may be subject to slides or liquefaction. Other issues indicated on the checklist as potential impacts include vegetation removal and habitat loss, a change in land use, increases in vehicular traffic and traffic circulation systems, an increase in ambient noise levels, aesthetic significance, and public controversy. Other concerns, such as air quality, water quality, and community services, were not considered to be adversely, or potentially adversely, impacted by the proposed project.



II. PROJECT DESCRIPTION

A. INTRODUCTION

The proposed project would result in the development of 11.2 acres of land in Oakland for 29 single-family dwelling units. The project site is zoned R-30 (One Family Residential) which requires a minimum lot area of 5,000 square feet, a minimum lot width of 45 feet, and a minimum street frontage of 25 feet.

B. LOCATION

The project site is located in the eastern hills of Oakland (the Montclair area). The regional location is shown in Figure 1, page 6. The site lies about 1,000 feet east of the Warren Freeway, and is bordered immediately on the east by the Joaquin Miller Park. The subregional location map, Figure 2, page 7, shows that the project site is located in a residential neighborhood. Figure 2 also gives an overview of the available vehicular access to the site.

C. GENERAL CHARACTERISTICS

1. Site Features

The project site consists of a steep-sided canyon with residential development along the ridge tops. The canyon sides are heavily vegetated, including chaparral on the south-facing slopes and pines, cypress, laurel, and eucalyptus trees on the north-facing slopes. There are no actual creeks on the site, although a swale runs from the eastern border toward the northwest at the bottom of the canyon which drains through a culvert to the creek located parallel to Larry Lane. Grading for a former road has taken place on the canyon floor.

2. Project Characteristics

The proposed development would consist of 29 single-family residential units; the lot sizes would vary considerably



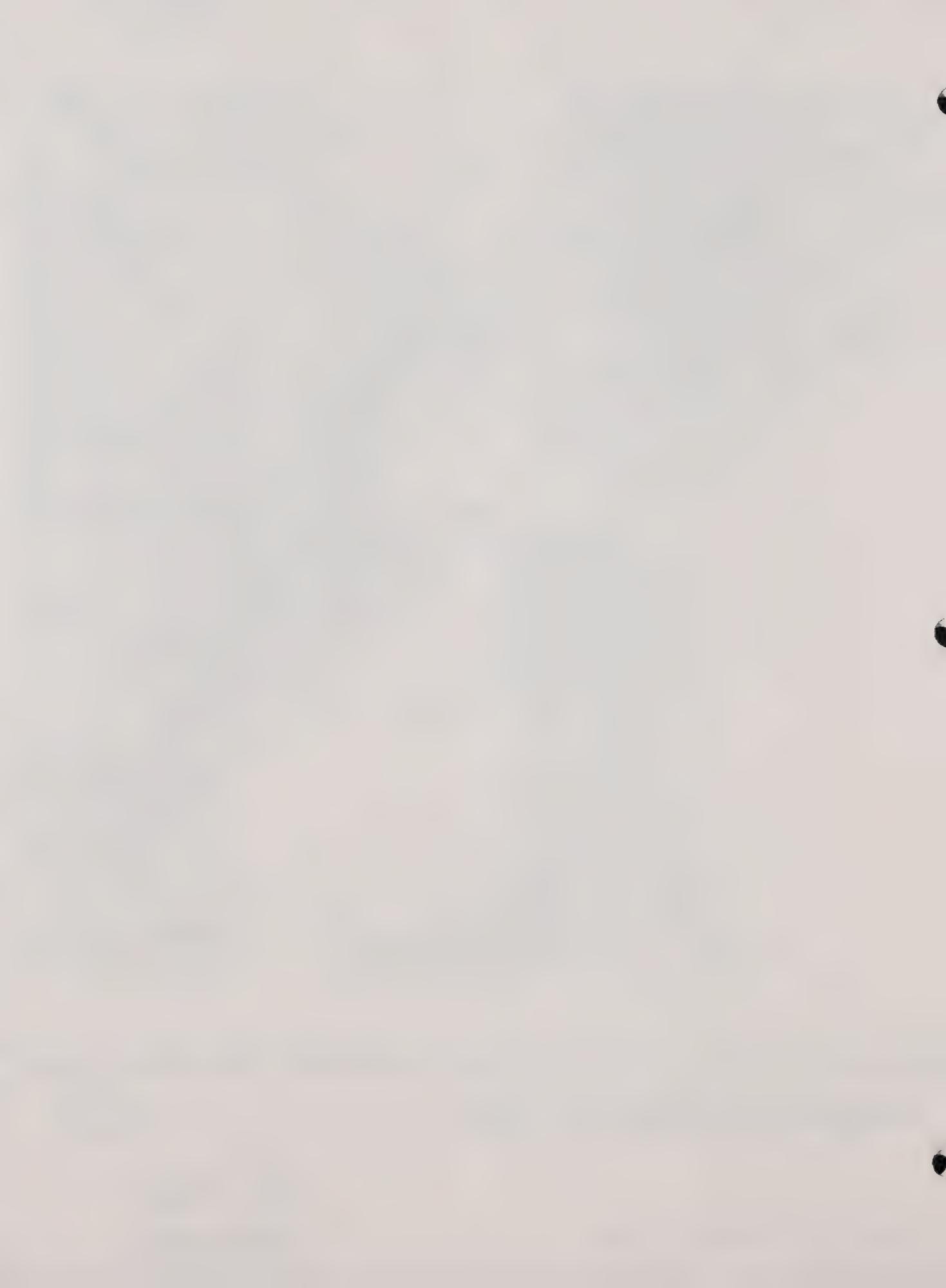
Regional Location Map

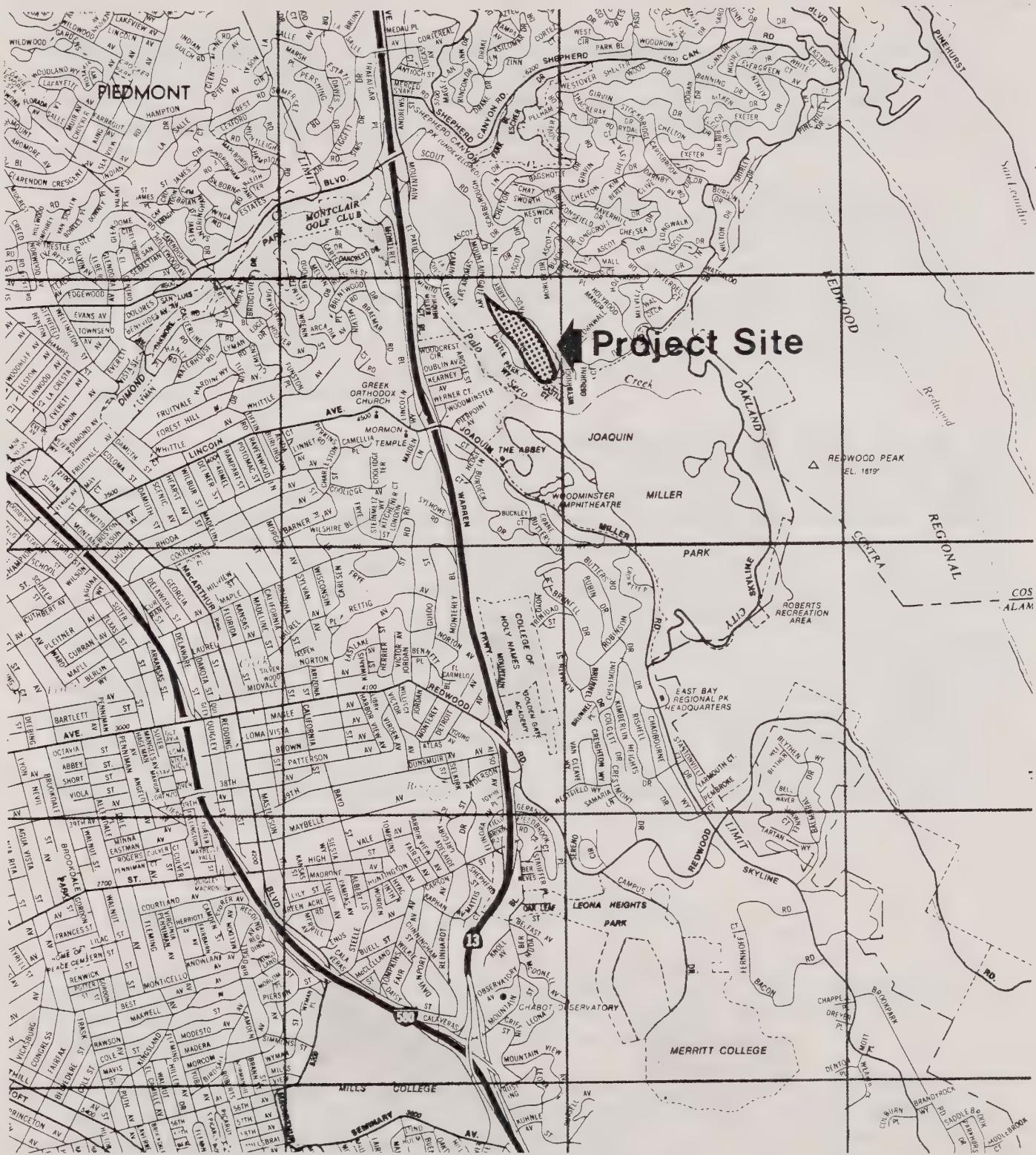


0 1 2 4 6
Scale Miles

Source: U.S. Geological Survey

Figure No.1



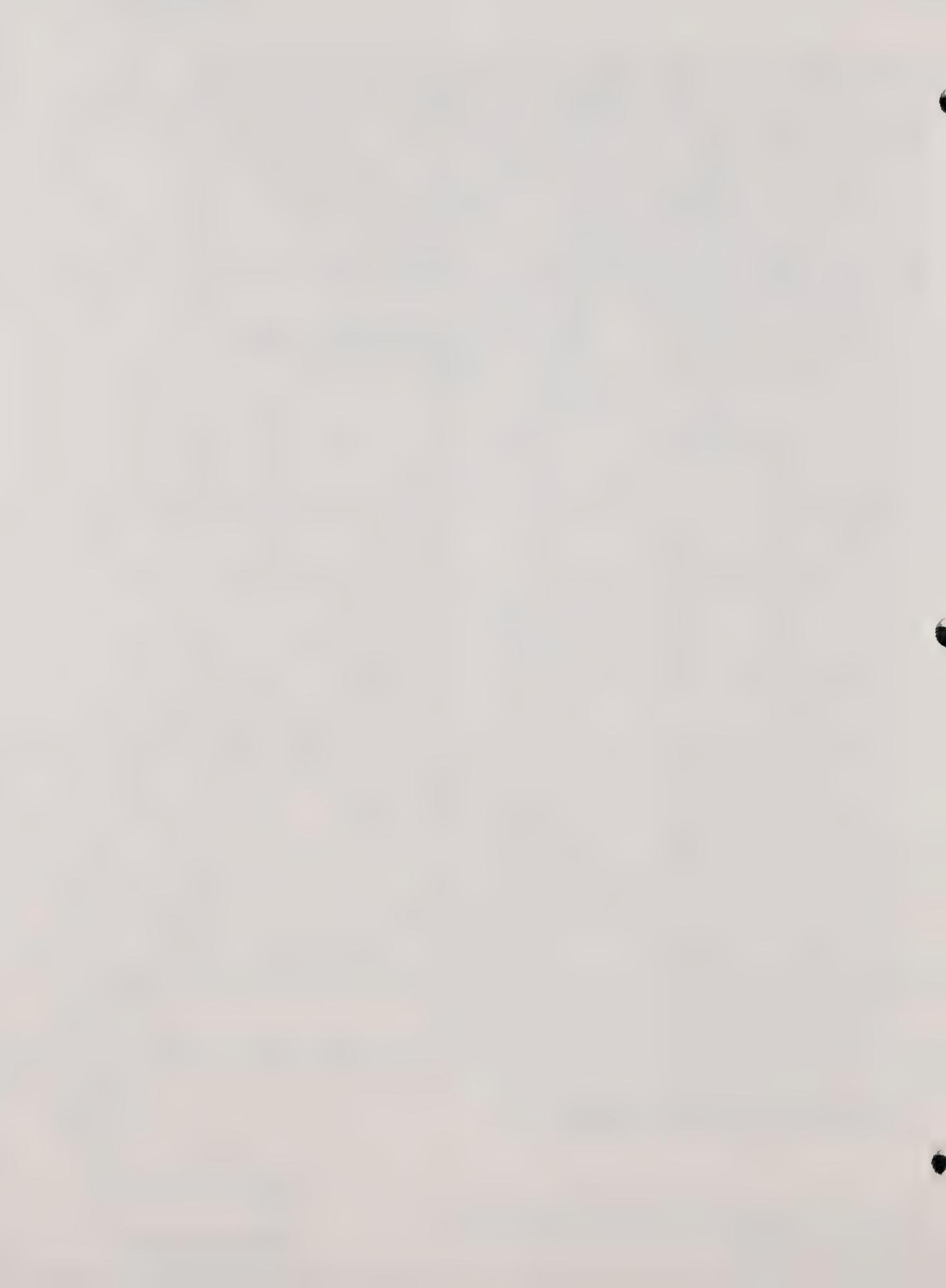


Site Location Map



Basic map reproduced by permission of the
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Scale Feet



throughout the site, from about 6,100 square feet up to at least 30,000 square feet; the lot widths would range from 70 feet to 160 feet with the majority (18 lots) being between 75 feet and 80 feet. A detailed lot and street layout map is shown in Figure 3, page 9.

Homes would front Castle Drive in the southern part of the site, and the houses located along the canyon floor would front the proposed Cypressvale Lane. Prices have not yet been determined for the houses, but it is estimated that the cost of each home custom built would be about \$125,000-\$180,000 (1978 dollars). The time of construction is uncertain; the developer may choose to develop the major part of the site at one time, or construct one house at a time, depending on the market.

No mass grading would take place; each home would have a foundation designed by a licensed structural engineer, and would be located on piles, either parallel to the slope or extending out over the slope. A minimum of vegetation would be removed, thus preserving the wooded atmosphere of the site. No extensive grading would be needed for the proposed Cypressvale Lane. It is estimated that about 300 to 500 cubic yards of balanced cut and fill would occur. The amount of site preparation would require several days of earthmoving activity. It is not expected that any material would be exported from the site. The Cypressvale Lane right-of-way would be 40 feet wide, including the existing concrete ditch along the southern edge of the graded road currently located at the valley floor. Cypressvale Lane would contain no curb, gutter, or sidewalk. Access to the site from existing roads would be from Mastlands Drive to the west and along Castle Drive for the houses fronting it.

D. RELATIONSHIP TO LOCAL PLANS AND POLICIES

The project site is within the City limits of Oakland. It is zoned R-30 (One-Family), and designated Low-Density Residential (less than eight units per acre) in the Illustrative Future Land Use Map of the Oakland General Plan.

The Oakland Policy Plan (City of Oakland, 1976) states that urban development should be related sensitively to the natural setting, with the scale and intensity of the development in each case bearing a reasonable relationship to the physical characteristics of the site.

The City of Oakland's Real Estate Subdivision Regulations state that: "Blind streets shall be not over three hundred (300) feet in length and shall be not less than fifty (50)."





Site Plan
(with driveway locations for safe sight distance shown)

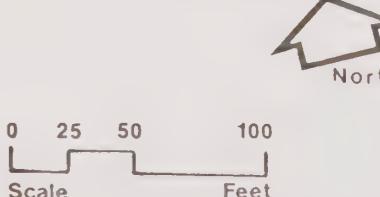


Figure No.3



The proposed 29-unit development would result in a density of about 2.6 units per acre.

III. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

A. GEOLOGY, SOILS, AND SEISMICITY

1. Setting

The proposed project lies within the California Coast Ranges. The north-facing canyon slope consists of serpentine, while the south-facing slope consists of shales and sandstones belonging to the Joaquin Miller Formation (USGS, 1969).

Serpentine is pale greenish-yellow in color and generally soft and intensely sheared. Soil development on serpentine is usually poor and seldom more than one foot thick. The stability of slopes underlain by serpentine is fair to poor, and where the serpentine is intensely sheared slides may occur in slopes as shallow as 2:1 (USGS, 1969). The serpentine on the project site supports 1:1 slopes, and is considered to be competent and exhibiting very good stability (Diablo Soil Engineers, 1978).

The Joaquin Miller Formation includes fine to medium-grained sandstone and shale and is yellowish-brown in color. This formation is generally very hard and supports many ridges in the area. The soil development varies from a few inches to three feet in thickness. The soil is very loose clayey sand loam, which is moderately expansive (Diablo Soil Engineers, 1978).¹ The stability of slopes underlain by this formation is good to fair, with some slumping occurring in cuts (USGS, 1969). The bedding planes of the deposits dip in a north-northwesterly direction (away from the canyon floor) at about 50-60 degrees (USGS, 1969).

Some downslope movement has taken place on the south-facing canyon slopes as evidenced by the presence of trees leaning towards the canyon floor. Toward the head of the valley, along Castle Drive, some artificial fill has been dumped to create small benches of level surface as an extension of Castle Drive; some slumping has occurred in the fill.

¹A copy of the soils report prepared by Diablo Soils Engineers is available for review at the Oakland City Planning Department.

Due to the presence of the three major active faults, the San Andreas, the Hayward, and the Calaveras, the Bay Area is one of the most seismically active parts of California. The Hayward Fault passes the proposed project site approximately 1,000 feet to the west. This fault was the cause of major earthquakes in 1836 and 1868 which resulted in lateral as well as vertical displacement along the fault. The maximum earthquake expected along the Hayward Fault is 7.5 on the Richter Magnitude Scale (Greensfelder, 1974), with a recurrence interval of 10-100 years for magnitude 6-7 events (USGS, 1975). An earthquake of magnitude 7.5 could result in rock accelerations of more than 0.5g (g is the force of gravity) (Greensfelder, 1974).

Current activity on the Hayward Fault is termed "tectonic creep", a slow continuous movement without significant earthquakes. Estimates of the slippage rate indicate that the fault is creeping from 0.01 to 0.1 inch per year. Surveys near Joaquin Miller Road indicate a 0.02 inch per year rate of creep (Diablo Soil Engineers, 1978).

The canyon floor is dissected by the Chabot Fault (USGS, 1969) which separates the serpentine from the Joaquin Miller Formation. This fault has not been determined as active or potentially active by the California Department of Mines and Geology (an active fault is one which has shown evidence of activity within the last 11,000 years; a potentially active fault is one which has shown evidence of movement within the last two million years).

2. Impacts

No extensive grading has been proposed for the project, either for the houses or for the proposed Cypressvale Lane along the canyon floor. The Cypressvale Lane would be smoothed, but it is not anticipated that any earth would be hauled away from the project site. The previously graded lane along the valley floor is approximately 750 feet long with a width varying from 15 feet in the east to 23 feet in the west near Mastlands Drive. It is expected that a maximum of 300 to 500 cubic yards of balanced cut and fill would be required for smoothing this existing roadway. The ditch along the southern edge of the roadway would remain should the proposed project be implemented. The ditch is about four feet wide and extends the entire length of the graded roadway. The ditch is terminated at the western end of the project site by a culvert, 18 inches in diameter, extending under Mastlands Drive across to the creek along Larry Lane. The fill previously placed along Castle Drive would not be used for foundation support for the proposed homes. The possibility of using the topographic bench created

by the fill for vehicular access to the homes is discussed in Section III.B., following. The capacity of the fill to sustain the load of vehicular traffic and a road surface without additional slumping occurring should be investigated in a soils report prepared prior to construction of the proposed access road.¹

Slope instability is often aggravated by an increase in the presence of water, either from irrigation or surface runoff. The proposed project would result in a slight increase in surface runoff, primarily from the pavement of Cypressvale Lane. The proposed homes would not contribute significantly to increased runoff. Runoff from the proposed project would amount to approximately 3.5 cubic feet per second (cfs) for a 10-year storm event. The culvert located at the bottom of the swale near the Larry Lane/Mastlands Drive intersection is capable of handling about 7 cfs. However, as often happens with culverts, debris accumulates around them, decreasing their effective diameter. Maintenance should therefore be undertaken to keep the culvert open, otherwise some overflow might occur during intense storms. The developer does not propose to clear the site of vegetation, so the existing vegetative cover would remain, except for some trees and bushes to be removed to accommodate the proposed structures.

The presence of faults indicates a zone of weakness which usually consists of sheared rocks on either side of the fault. The Chabot Fault along the canyon floor has been determined inactive but could still constitute a zone of weakness; however, no structures are proposed along this area, only the proposed Cypressvale Lane.

In the event of an earthquake occurring along the Hayward Fault, the project site would experience groundshaking that could induce accelerated downslope movement of the soils. This would constitute a constraint on the proposed project rather than an impact on the environment resulting from the implementation of the proposed development.

3. Mitigation

To limit the increase in surface runoff, landscaping would consist of native, deer-tolerant plants including manzanita (Arctostaphylos spp), wax myrtle (Myrica Californica), "California lilac" (Ceanothus spp), California coffee berry (Rhamnus Californica), and elderberry (Sambucus Caerulea).

¹See Appendix B.

Complete soils studies (including soil borings) would be prepared by a licensed geotechnical or civil engineer on a lot-by-lot basis prior to the filing of building permit applications for the proposed project; all recommendations contained within these report would be adhered to, including recommendations regarding optimum building sites.

B. TRAFFIC

1. Setting

The existing roadway network serving the project site is shown in Figure 4, page 14. Regionally, the site is served by State Highway 13, a four-lane freeway, with the nearest access point at the Park Boulevard/Mountain Boulevard interchange. Mountain Boulevard and Ascot Drive, which are two-lane collector roads, would be used by project traffic to reach Highway 13 and the commercial areas near Moraga Avenue and Shepard Canyon Road. Site access is provided by Mastlands Drive, Larry Lane, Mountaingate Way, and Castle Drive, all of which are two-lane local roads.

Roadway design in the area (in terms of roadway widths, grades, and sight distances) is generally less than ideal, although it meets generally accepted design standards for traffic volumes carried.¹ Roadway widths on local roads surrounding the site vary throughout in their lengths, but are generally 20 to 24 feet wide.

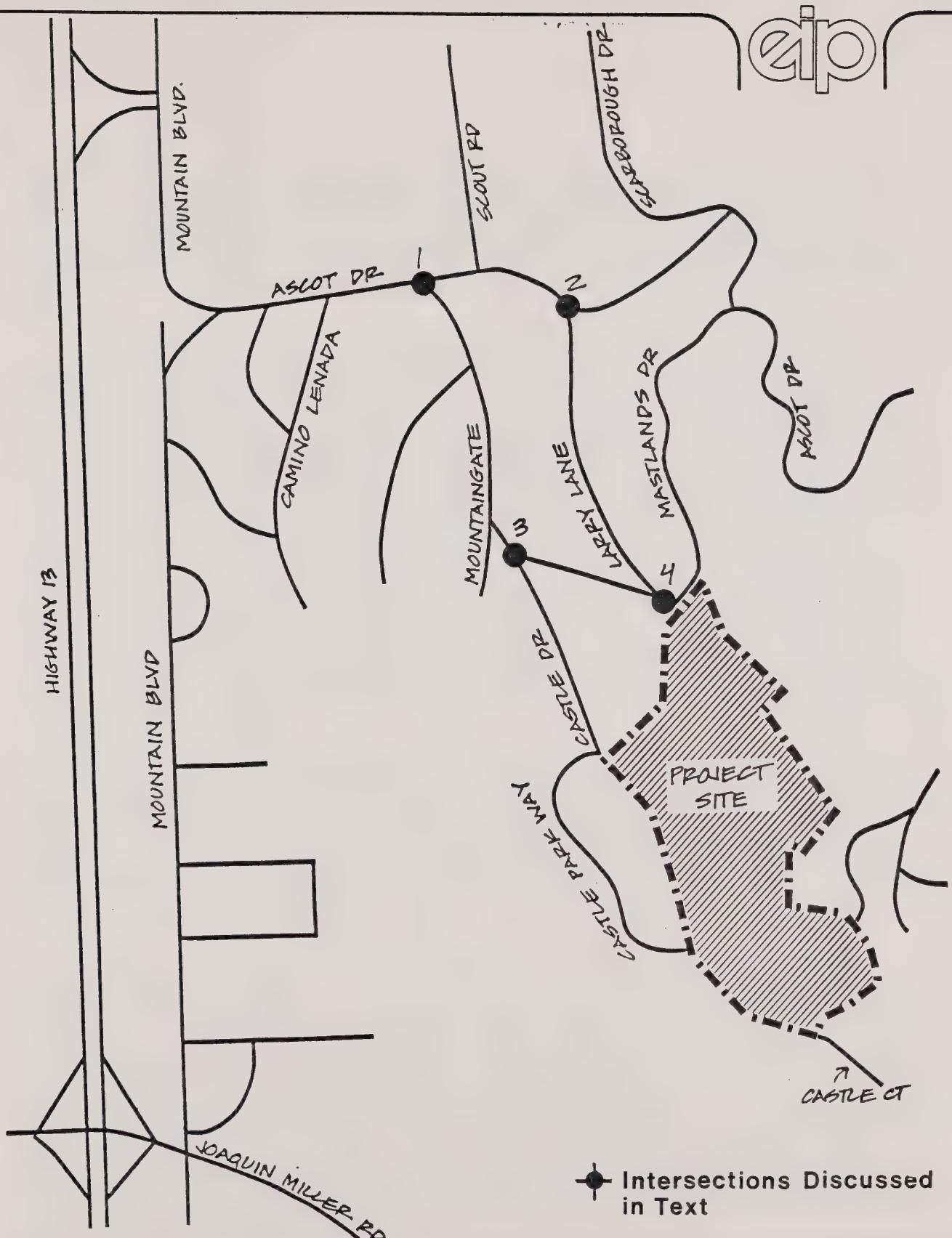
The following is the most recent traffic count information available for the roads in the area:

<u>Roadway</u>	<u>24-Hour Traffic</u>
Ascot Drive (near Mountaingate Way)	7,049*
Mountaingate Way (near Ascot Drive)	1,480*
Castle Drive	less than 500**
Larry Lane	less than 500**
Mastlands Drive	less than 500**

*Traffic counts from City of Oakland Traffic Department

**Traffic estimates from City of Oakland Traffic Department

¹Based on recommended design standards for local streets listed in "Design of Local Roads and Streets," American Association of State Highway Officials, 1970.



Roadway Network Serving Project Site



Not to Scale

Figure No.4

2. Impacts

Figure 4 shows the proposed roadway system that would serve the project. The project consists of 29 lots containing one single-family dwelling unit each. Eighteen of these dwelling units would have their driveway access on Castle Drive, while 11 units would have driveway access on the proposed Cypressvale Lane.

Based on research counts conducted by the Institute of Transportation Engineers and Caltrans District 4 (Bay Area), an average single-family dwelling unit generates about 10 two-directional vehicle trips per day. The City of Oakland Traffic Engineering Department has conducted traffic counts in the Sequoyah Park area (Southeast Oakland) in order to establish the trip generation rate of single-family units in Oakland which do not have convenient transit service. This study showed a daily trip rate of slightly less than 16 trips per dwelling unit. The proposed project would have convenient local and express bus service to downtown Oakland and downtown San Francisco, and consequently should have a lower trip rate. However, the higher trip rate (16 trips per unit) is used in this report to show a worst-case analysis. Consequently, the project would add about 460 daily vehicle trips to the surrounding roadway system.

Most of these trips would be to and from either Highway 13 or the commercial areas near Moraga Avenue and Shepard Canyon Road. (About 10 to 15 percent of the trips would be school-related trips.) Thus, most of the project-related traffic would use Ascot Drive and Mountain Boulevard as part of its trips. Dwelling units with driveway access on Cypressvale Lane would use either Larry Lane or Mountaingate Way to reach Ascot Drive.

To pinpoint potential problem areas, a "worst case" traffic distribution was used. First, all 460 project-related daily trips were assigned to Mountaingate Way. Although Mountaingate Way would carry most of the project-related trips, it is unlikely that it would handle more than 80 percent of them. Next, all the 180 daily trips from dwelling units with driveway access on Cypressvale Lane were assigned to Larry Lane. It is unlikely that more than half these trips would use the very narrow Larry Lane to reach Ascot Drive. This distribution, which assigns more than 100 percent of the project-related traffic to the street network, provides a method to define potential impacts that would need further study.

In addition to the 18 project-related dwelling units on Castle Drive, there are also two other single-family dwelling units currently under construction on Castle Drive. This total of

20 dwelling units would add 320 daily vehicle trips to Castle Drive where it intersects with Mastlands Drive.¹

Based on the above distribution, the traffic volumes on the streets in the area with the proposed project would be:

<u>Broadway</u>	<u>24-Hour Traffic</u>
Ascot Drive (near Mountaingate Way)	7,533
Mountaingate Way (near Ascot Drive)	1,964
Castle Drive	less than 830
Larry Lane	less than 680
Mastlands Drive	less than 680

The estimated two-directional peak hour traffic flow on Ascot Drive would be about 700 vehicles per hour. Given this volume, the capacity of the stop sign-controlled approaches at Mountaingate Way and Larry Lane (locations 1 and 2, Figure 4, page 14) would be about 200 vehicles per hour. The critical period for these approaches would be the morning peak hour when vehicles are making left turns onto Ascot Drive. During the morning peak hour, with the project, there would be an estimated 140 vehicles per hour on the Mountaingate Way approach to Ascot Drive, and 50 vehicles per hour on the Larry Lane approach to Ascot Drive. Consequently, these intersections would operate well below their capacities, even under a worst-case analysis.

Ascot Drive handles a substantial amount of peak hour/peak direction traffic (estimated at about 500 vehicles per hour). However, the project would add only about 30 peak hour/peak direction trips to Ascot Drive. Consequently, the project would not have a significant impact on the operating level of service of Ascot Drive.

Castle Drive and Mastlands Drive each carry an estimated maximum of 50 peak hour two-directional trips. The project would add about 30 peak hour two-directional trips to Castle Drive, and about 10 peak hour two-directional trips to Mastlands Drive. The Castle Drive/Mastlands Drive intersection is currently uncontrolled. If it were stop sign-controlled, the stop sign-controlled approach would have a capacity of at least 500 vehicles per hour. Consequently, this increase in traffic would not have a significant impact on the operating level of service of the Castle Drive/Mastlands Drive intersection (location 3, Figure 4, page 14), nor would it have significant impact at other intersections on these two roadways.

¹Within a one-mile radius of the project site, uphill from the site, there are some vacant lots which could eventually be developed for residences; these residences could use Castle Drive for access.

The project would generate about 10 peak hour two-directional trips on the proposed Cypressvale Lane, where it intersects with Mastlands Drive (location 4, Figure 4, page 14). This increase in traffic would not have a significant impact on the operating level of service of Mastlands Drive.

Castle Drive is currently a 24-foot wide (the width varies throughout its length) roadway without curbs or sidewalk and is lined with closely spaced eucalyptus trees up to the pavement edge. The City of Oakland recently has passed Ordinance 7971 which calls for construction of curbs, gutters, and sidewalks on streets in any new tract that is developed in the City. The addition of curbs, gutters, and a sidewalk on Castle Drive would mean removal of all the eucalyptus trees that line the project side along that roadway.

Local residents have indicated a desire for the eucalyptus trees to remain. From a traffic engineering standpoint, the trees create positive and negative factors in terms of safety (see Section II.C., Vegetation, for a discussion of the condition of the trees). The trees would provide a natural physical barrier to prevent cars from leaving the roadway. However, the trees also greatly reduce the sight distance along Castle Drive. Consequently, a potential adverse impact of the proposed project would be created if the trees remain, and driveways along Castle Drive are not located with adequate sight distance for safety.

The addition of a sidewalk on Castle Drive would improve safety for pedestrians. However, pedestrian traffic along Castle Drive is currently light, and the proposed project would not significantly change the current pedestrian environment.

3. Mitigation

The potential adverse impact of inadequate sight distance along Castle Drive, if the trees remain, could be mitigated if driveways were properly located. An initial survey was conducted to conceptually place driveways along Castle Drive so that (1) there would be minimum of 200 feet of sight distance¹ and (2) the minimum number of trees were removed. Figure 3, page 9, conceptually shows the driveway locations which best meet these criteria.

Combined driveway access is recommended in two locations (one serving two lots, and one serving five lots) to maintain a

¹

Minimum sight distance recommended by American Association of State Highway Officials for 25-30 mph.

minimum 200-foot sight distance. According to the City's Traffic Engineering Department, if adequate storage space is provided between the common driveway and the individual garages for a vehicle to park without blocking the common driveway, then a common driveway serving five dwelling units should be allowed under current zoning. Most driveways do not require any tree removal, while others may require the removal of one or more trees to either physically accommodate the driveway or to provide extra sight distance for a driveway.

It should be emphasized that these driveway locations were made solely on the basis of traffic safety, and minimizing the removal of trees. Approximately five to seven trees would need to be removed under this plan and the minimum of 200 feet of sight distance would be maintained. The locations may need to be modified due to other considerations (i.e., soil conditions, house and garage location, etc.). However, moving a driveway location may involve the removal of a substantial number of trees to provide a safe sight distance.

C. VEGETATION

1. Setting

The project site is heavily vegetated with native and non-native species. The north-facing slope is dominated by Monterey cypress, and eucalyptus trees with some California laurels and coast live oaks, while the south-facing slope is primarily vegetated by chapparel. Along most of Castle Drive where it adjoins the project site, large eucalyptus trees border the northern side of the road. The vegetation provides resting and feeding habitat for a variety of wildlife.

Wildlife occurring near Joaquin Miller Park consists of species common to the Berkeley Hills region. Common mammal species that may inhabit areas on or adjacent to the project site include the red squirrel, dusky-footed wood rat, western gray squirrel, and house mouse. Typical larger mammals may include gray fox, striped skunk, and mule deer.

The dense vegetation of Joaquin Miller Park near the project site affords extensive avian habitat, and supports many birds common to the area, such as the winter wren, Hutton's vireo, white-breasted nuthatch, black-headed grosbeak, Steller's jay, pygmy nuthatch, robin, chipping sparrow, and several cosmopolitan species such as the house finch and English sparrow. Most of these birds would be expected to inhabit residential areas near the Park.

2. Impacts

The developer is not proposing to remove vegetation except as necessary to accommodate the proposed homes, and along Cypressvale Lane at the canyon floor. Special care would be taken to preserve oak and laurel trees. This would leave most of the project site in its present condition with large habitat areas still available to support existing wildlife. However, it can be expected that the increased human activity resulting from 29 new homes would cause some migration of existing wildlife.

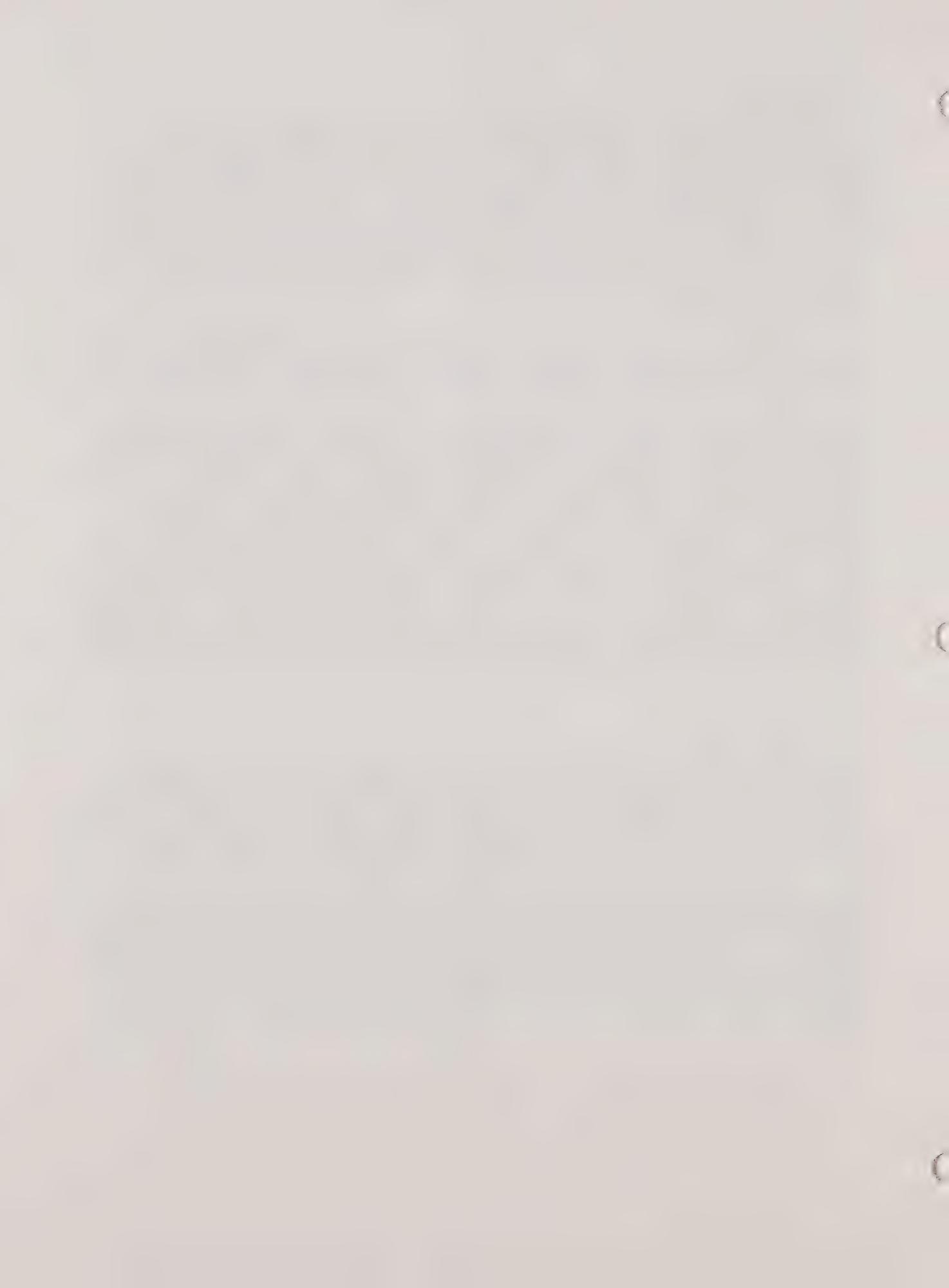
About five to seven of the eucalyptus trees along Castle Drive would be cut down to provide access to driveways and for safe sight distances when exiting onto the road from driveways.

The eucalyptus trees along Castle Drive (119 in number) show evidence of new growth on the trunk, commonly referred to as suckers, sucker growth, or water sprouts. This type of growth usually occurs following trimming or reduction in height of the trees; the new growth is fast growing and not strongly attached to the parent trunk or limb. During summer and winter, this growth can and does become detached and falls, many times from heights greater than 50 feet. It is not unusual for sucker growth limbs to attain lengths of 20 to 25 feet and diameter of four to six inches in only three years. The sucker growth could limit sight distances in the future, and thinning could only further aggravate the problem.

3. Mitigation

To prevent habitat loss for existing wildlife and to screen views, future homeowners should not remove vegetation from their lots for gardening or other uses. Not only would habitat be lost if this were done, but views from uphill residences would also be altered and increased soil erosion may ensue.

Care should be employed to minimize the number of trees to be removed for construction of the proposed homes; the developer would be required to obtain a tree removal permit before each house is issued a building permit. The hazards from eucalyptus sucker growth limbs could necessitate removal of the trees along Castle Drive, despite the aesthetic loss to the environment.



D. NOISE

1. Setting

The project site is located in a low-density residential neighborhood where traffic is the main noise source (see Section III.B. for a discussion of existing traffic volumes).

2. Impacts

The existing noise environment would be altered significantly during construction. The primary noise sources would be trucks entering and leaving the project site and the machines used for the paving of Cypressvale Lane. These pieces of equipment typically emit from 83 to 90 dBA at a distance of 50 feet. The equipment would be present only during working hours on weekdays. During framing of the houses, trucks would continue to be the most significant noise source. The noise created by power saws and hammering would also be significant.

Following implementation of the proposed project, the project generated traffic would increase the present traffic noise on adjacent properties.

3. Mitigation

All construction should be kept within normal working hours, and no construction should take place on weekends.

E. COMMUNITY SERVICES

1. Police Services

a. Setting

The project site would be served by the Oakland Police Department. The area is currently patrolled by the Police Department on a regular basis. Patrol time allocation is based on the number of calls received from the patrol area. Estimated response time is three minutes in case of emergency calls and less than one hour in case of non-emergency calls. The Police Department offers two homeowner education programs for area residents. The first is the Home Alert program wherein officers are made available on a monthly or bi-monthly basis to come to homes, equipped with audiovisual equipment, and talk about crime and how to avoid becoming a victim thereof. The second, which

is especially applicable to new homes, is the Home Security Inspection Program, wherein two officers inspect a new home's security measures, explain why they are or are not adequate, and recommend mitigation measures (Nichelini, 1979).

b. Impacts

The project area is already patrolled, and existing manpower and equipment is considered adequate to meet potential need (Nichelini, 1979).

2. Fire Protection

a. Setting

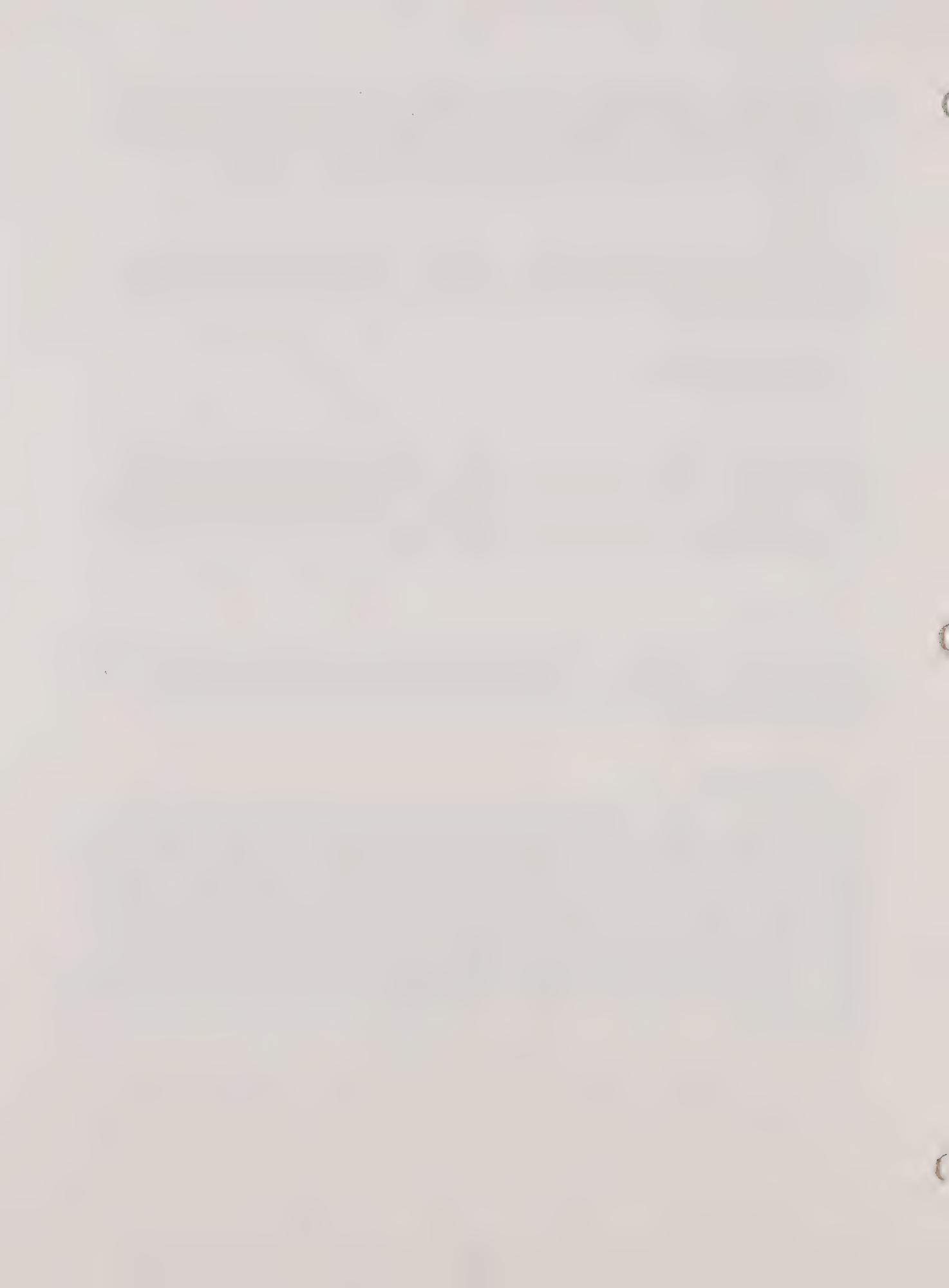
The project site is served by Oakland Fire Department Station 24 located on Mountain Boulevard, and Station 25 on Joaquin Miller Road. Station 24 has an engine and truck and Station 25 has an engine. Estimated response time to the project site is five minutes (Taylor and Fyfe, 1979).

b. Impacts

Sufficient manpower and equipment are available to serve the project site. Impacts could only occur on houses located more than 150 feet from either Cypressvale Lane or Castle Drive (Taylor and Fyfe, 1979).

c. Mitigation

Although the Fire Department does not anticipate any trouble serving the site, it should be pointed out that Fire Department regulations prohibit driveways over 150 feet long. Driveways longer than this make it impossible for the fire truck hose to reach the house. In general, houses in the project should not be located over 150 feet from the street. The driveway to Lot 19 is 130 feet long; the house on Lot 19 would therefore have to be located as close as possible to the end of the driveway. Any construction should be subject to approval by the Fire Department.



3. Education

a. Setting

The project site is located within the Oakland Unified School District. Skyline High School, Montera Junior High School, and Joaquin Elementary School currently serve the project area (Long, 1979).

b. Impacts

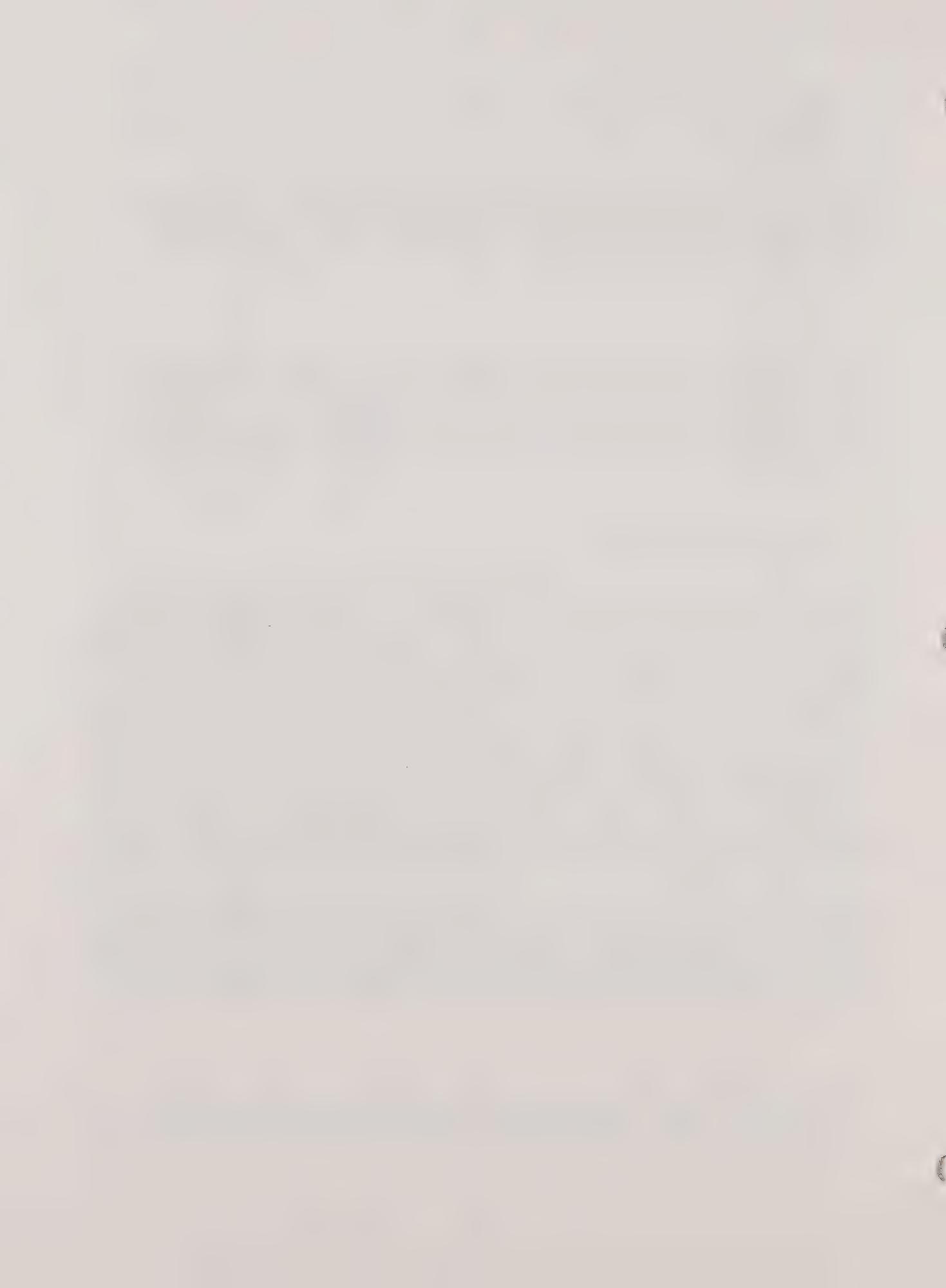
The proposed project would generate approximately one student per household, a total of 29 students, half of whom would be of elementary age and half of high school age. The above mentioned schools would be able to accommodate these students without additional requirements for staff or facilities.¹

F. COMMUNITY CONCERNs

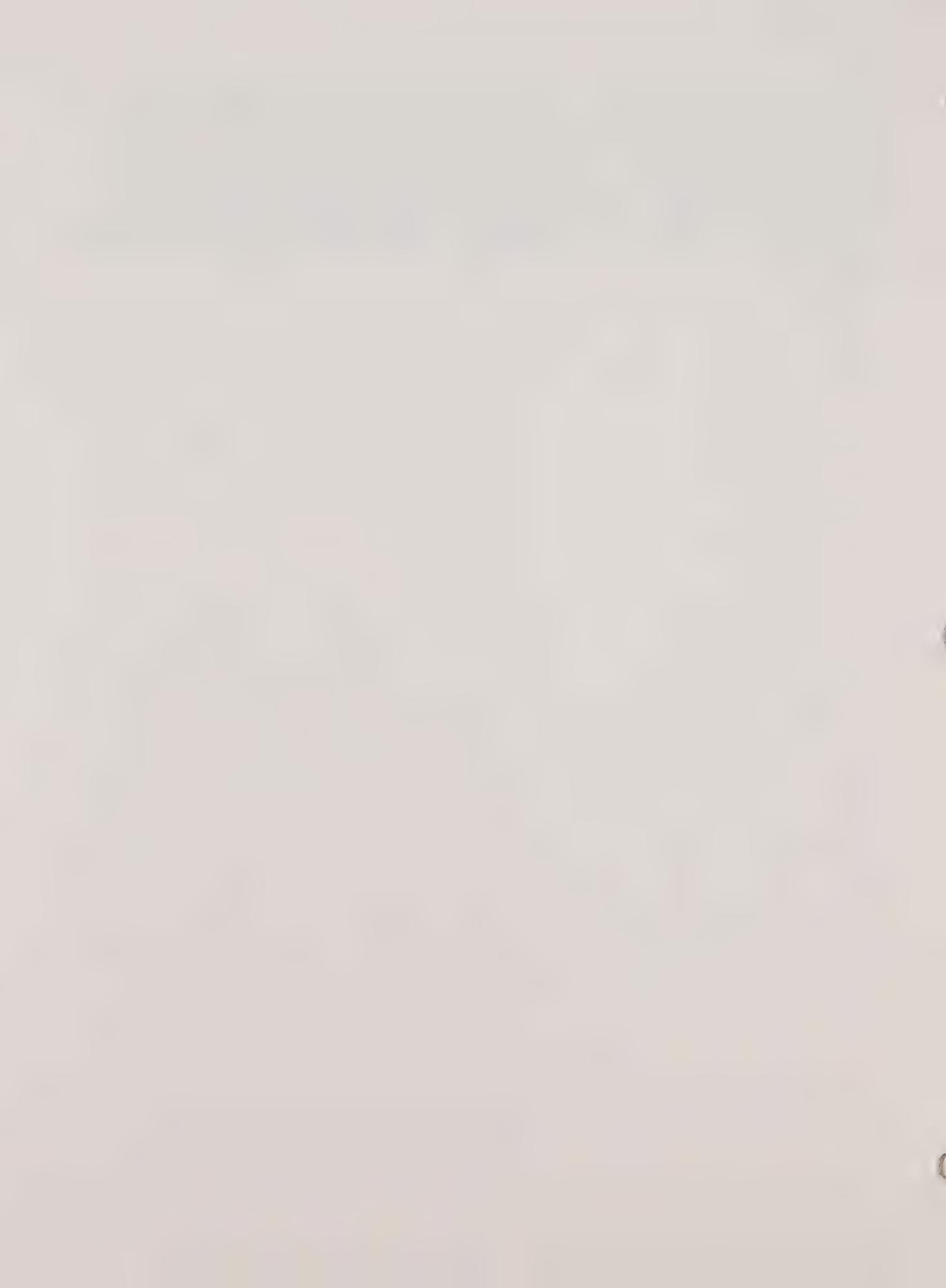
The community near the proposed project has expressed strong interest in the proposed development. Prime concerns relate to the change in land use from open space to residential. The site currently provides a relief from the surrounding residential lots, with vegetation producing habitat for a diversity of wildlife. Many community members feel that the lack of housing on the 11-acre project site enhances the feeling of remoteness from the large urban environment of the Bay Area. Development of the project site would invite more people to move into the neighborhood, thereby increasing density. The area's current low density is the reason that many people choose to live in the Oakland Hills. The proposed project would not only result in an increase in the number of people in the area, but also would increase the number of vehicles using surrounding streets.

The main concern expressed by the residents has been the potential problems resulting from an increase in project-generated traffic on nearby roads, and the safety of backing onto Castle Drive from driveways abutting this street. As discussed in Section III.B. Traffic, Mitigation, one alternative regarding

¹Robert Long, Coordinator, Capital Planning, Oakland Unified School District, letter of 14 March 1979 (Appendix D).



access would be careful positioning of the driveways and removal of a minimal number of trees resulting in safe sight distances from each driveway fronting Castle Drive. If all the eucalyptus trees were to be removed due to safety hazards and/or installation of sidewalks, sight distances would not present a problem. However, few places in the project area have sidewalks, and some residents feel that the lack of sidewalks adds to the rural atmosphere of Montclair and the Oakland Hills.



IV. ALTERNATIVES

A. NO PROJECT

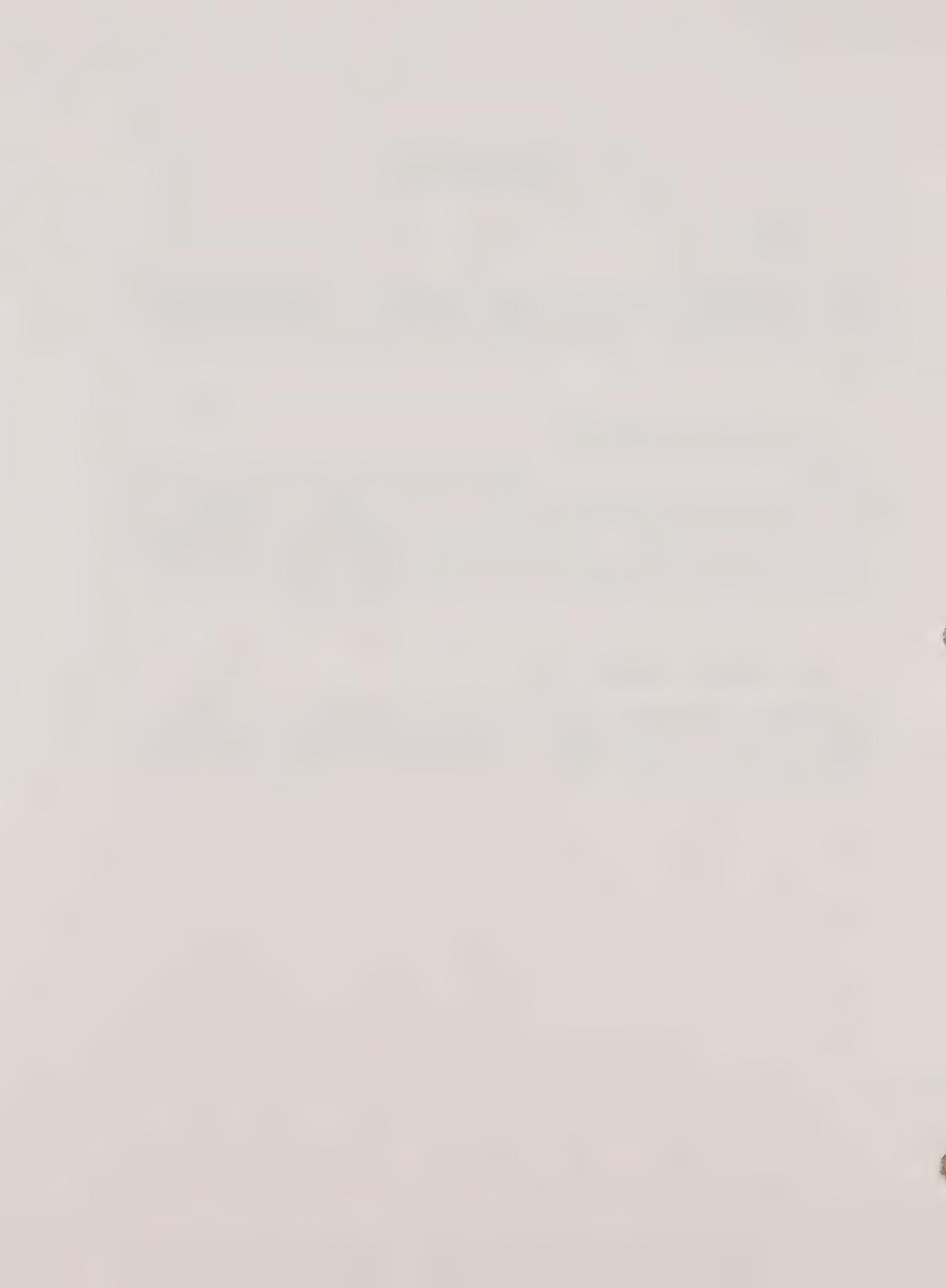
The no project alternative would entail leaving the project site undeveloped in its present condition. This would not be in conformance with the zoning or General Plan designations.

B. OPEN SPACE ALTERNATIVE

The City of Oakland could condemn and acquire the site for public use at a fair market price. This would preserve the project site as open space with public access, constituting a potential extension of the Joaquin Miller Park southeast of the project site, but would not meet the objectives of the project sponsor for developing the project site.

C. LOW DENSITY ALTERNATIVE

By reducing the number of lots on the project site, fewer homes would be constructed. This would result in less influx of people, fewer vehicle trips generated, and shorter construction period.



V. SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

- Earthquake-induced groundshaking could induce downslope movement of surface soils on the canyon slopes.
- Removal of row of eucalyptus trees along Castle Drive due to hazardous growth and following implementation of the City of Oakland's Ordinance 7971 regarding street improvements (construction of curbs, gutters, and sidewalks) adjacent to any new tracts, would have a significant aesthetic impact.
- Some decrease in wildlife population due to increased human activity on the project site.
- During construction, an increase in truck traffic and construction activities would increase noise levels on adjacent properties.

VI. GROWTH-INDUCING IMPACTS

The proposed project would result in a small population growth in Oakland. The total of 29 residential single-family homes would result in a population increase of approximately 90 people (assuming 3.1 persons per house) (Bureau of Census, 1970). The development of the area is in conformance with the City of Oakland's General Plan.

Regional studies prepared largely to investigate means by which air pollution in the Bay Area can be decreased, recommend that development be concentrated, to as large an extent as possible, in already established urban areas. A large percentage of the employed population of the proposed project would most likely work in Oakland or San Francisco, thereby necessitating the use of automobiles. The project in itself would not significantly decrease the air quality of the area; however, it is the accumulation of impacts from many such small projects that contributes to existing regional problems.

Growth has been almost universally considered a positive step for communities as a way to increase their revenues. By allowing lands to be developed, property tax revenues increase and the immediate retail environment expands, which potentially induces further secondary growth. However, city costs usually increase at a high rate. The cumulative effects of developments usually result in the need for expanded fire protection, police services, public works, school facilities, utilities, and city officials to handle additional administrative services.

VII. REFERENCES

Bureau of the Census. Census Tracts, San Francisco-Oakland, California, Standard Metropolitan Statistical Area, 1970 Census of Population and Housing.

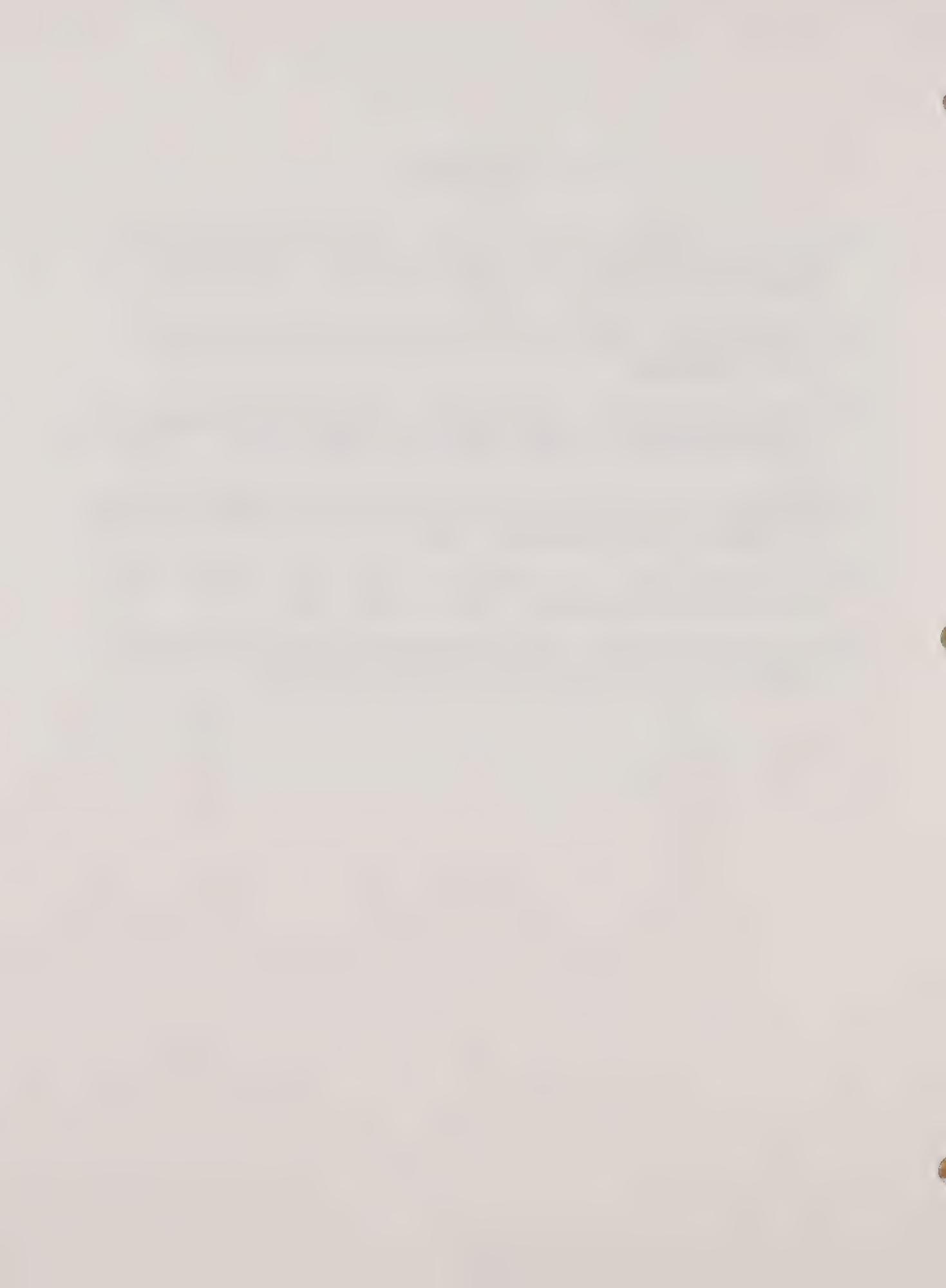
City of Oakland. Oakland Policy Plan, A Component of the Comprehensive Plan, Land Use and Urban Design Section. 1976, (amended).

Diablo Soil Engineers. Geotechnical Reconnaissance Report, Castle Drive Subdivision, Oakland, California. 25 January 1978.

Greensfelder, R.W. Maximum Credible Rock Accelerations From Earthquakes in California. California Division of Mines and Geology, Map Sheet 23, 1974.

U.S.G.S. Aerial and Engineering Geology of the Oakland East Quadrangle, California. Map GQ-769, 1969.

U.S.G.S. "Studies for Seismic Zonation of the San Francisco Bay Region," Professional Paper 941-A, 1975.



VIII. EIR AUTHORS AND PERSONS CONSULTED

A. PROJECT STAFF

1. Environmental Impact Planning Corporation
Project Manager: Yane Nordhav
Project Coordinator: Tom Crews
Environmental Law: Douglas Donaldson
Editor: Leena Lassila
2. Traffic: Alan M. Voorhees & Associates

B. ORGANIZATIONS AND INDIVIDUALS CONSULTED

1. City of Oakland

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Marc Herbert, Assistant Director of Planning
Willie Yee, Assistant Planner

Department of Public Works
Vern Sullivan, Engineer

Police Department
Robert Nichelini, Aide, Oakland Chief of Police

Fire Department
Godwin Taylor, Fire Marshall
Robert Fyfe, Captain

2. Oakland Unified School District

Robert Long, Superintendent of Schools

3. Park Properties

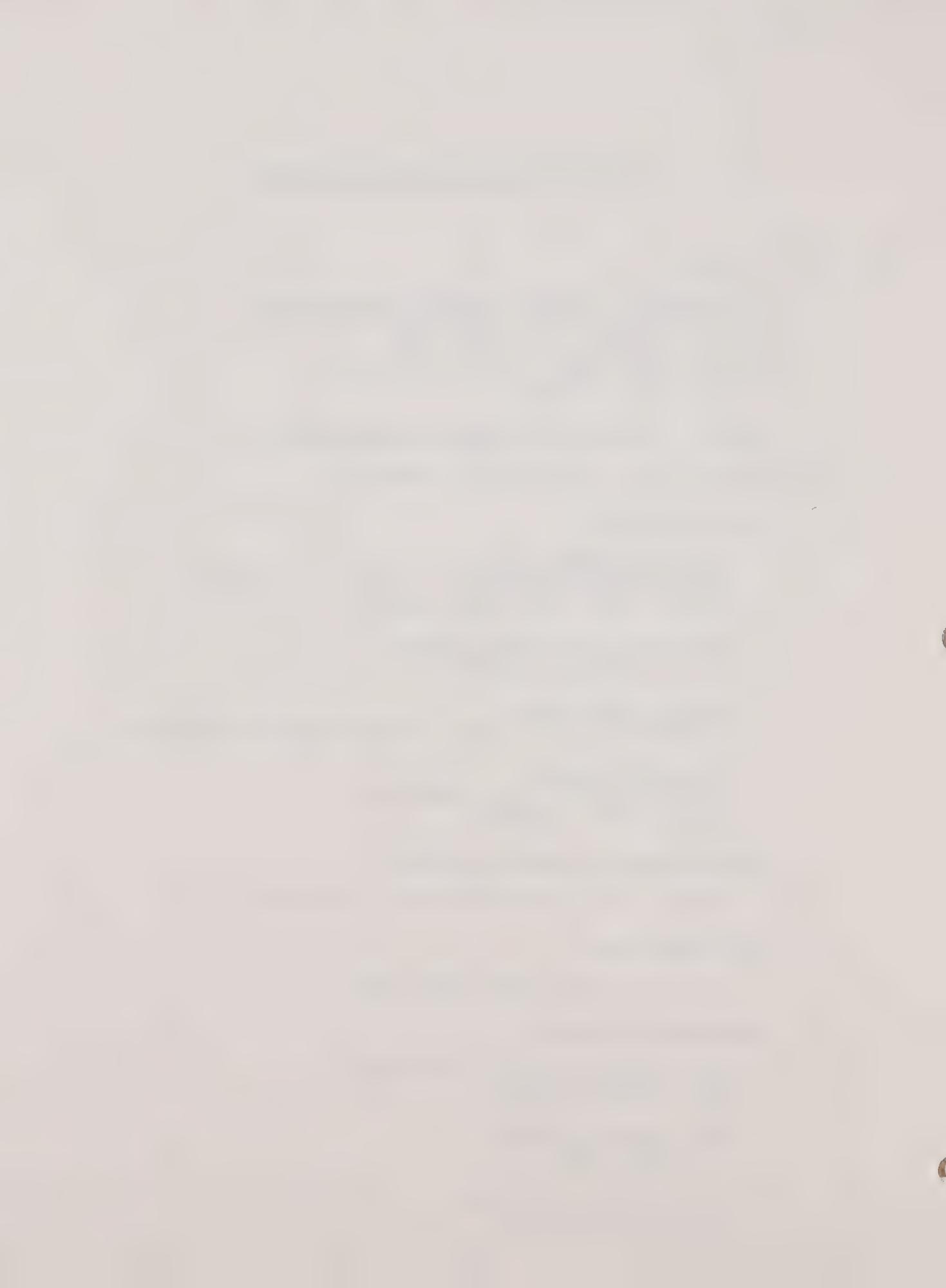
John Sue, Landscape Architect

4. Concerned Citizens

Mr. and Mrs. Clyde C. Bohannan
6010 Castle Drive

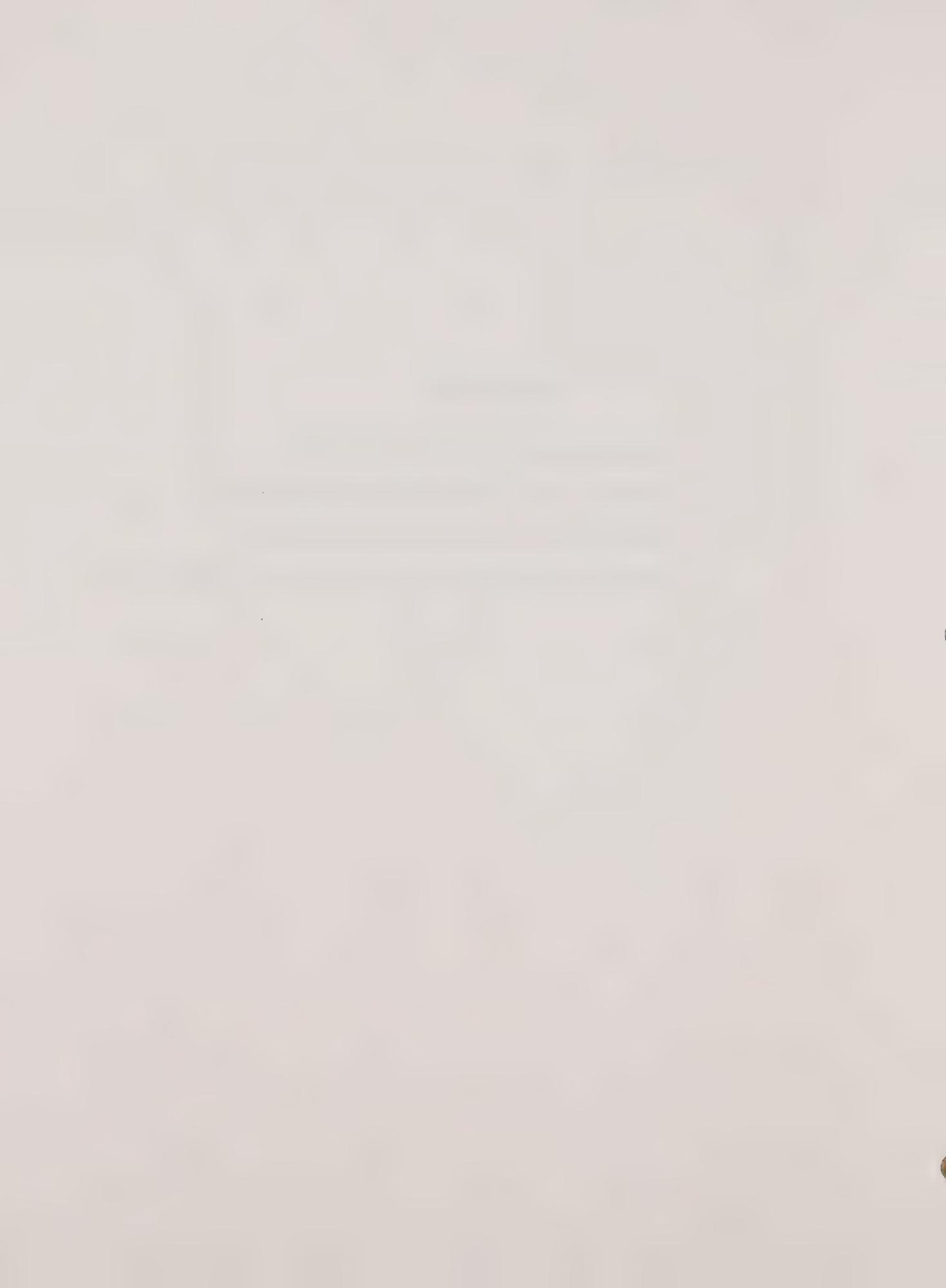
Mr. George Lenahan
45 Castle Lane

Mr. and Mrs. Poulton
6131 Castle Drive



APPENDICES

- A. Environmental Review Checklist
- B. Letter from Diablo Soils Engineers
- C. Roadside Tree Inventory and Report
- D. Letter from Oakland Unified School District



APPENDIX A
ENVIRONMENTAL REVIEW CHECKLIST

INITIAL STUDY
California Environmental Quality Act

I. DESCRIPTION OF THE PROJECT Tentative Map for a 29 lot subdivision on Castle Drive between 5737 and 6065 Castle Drive and near 4104 Mastlands Drive.

II. DESCRIPTION OF THE ENVIRONMENTAL SETTING A steep sided canyon of 11.2 acres with it's entrance at Mastlands Drive. The western slope is forested with cypress and eucalyptus trees the eastern slope is mostly chaparral. There is a paved drainage ditch running most of the length of the canyon floor alongside an old road.

		Yes	Maybe	No	Source or Explanation
<u>Geophysical</u>	Will the proposal result in:				
1.	Unstable earth conditions, including erosion or slides, or changes in geologic substructures either on or off the site?			X	
2.	Major changes in topography or ground surface relief features?			X	
3.	Construction on loose fill or other unstable land which might be subject to slides or liquefaction during an earthquake?		X		
4.	Construction within one quarter mile of an earthquake fault?	X			
5.	Substantial depletion of a nonrenewable natural resource or inhibition of its extraction?			X	
<u>Air and Water</u>	Will the project result in:				
6.	Substantial air emissions, deterioration of ambient air quality or the creation of objectionable odors?			X	
7.	Substantial degradation of water quality?			X	
8.	Changed drainage patterns or increased rates or quantities of surface water runoff?	X			
9.	Interception of an aquifer by cuts or excavations?			X	
<u>Biotic</u>	Will the project:				
10.	Reduce the quantity of fish and wildlife in the project vicinity, interfere with migratory or other natural movement patterns, degrade existing habitats or require extensive vegetation removal?		X		
11.	Reduce the numbers of any rare or endangered species of plants or animals?			X	
<u>Land Use and Socio-Economic Factors</u>	Will the project:				
12.	Conflict with approved plans for the area or the Oakland Comprehensive Plan?			X	
13.	Carry the risk of an explosion or the release of hazardous substances, including oil, pesticides, chemicals or radiation?			X	
14.	Require relocation of residents and/or businesses?			X	
15.	Cause a substantial alteration in neighborhood land use, density or character?			X	
16.	Generate substantially increased vehicular movement or burden existing streets or parking facilities?		X		
17.	Elicit substantial public controversy or opposition?		X		
18.	Have a substantial impact on existing transportation systems or circulation patterns?		X		
19.	Result in a substantial increase of the ambient noise levels for adjoining areas?		X		
20.	Impose a burden on public services or facilities including fire, solid waste disposal, police, schools or parks?			X	
21.	Impose a burden on existing utilities including electricity, gas, water, and sewers?			X	
22.	Destroy, deface or alter a structure, object, natural feature or site of historic, architectural, archeological or aesthetic significance?			X	
23.	Involve an increase of 100' or more feet in the height of any structure over any previously existing adjacent structure?			X	

<u>Energy: Will the project:</u>	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>Source or Explanation</u>
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24. Use or encourage use of substantial quantities of fuel or energy? _____ X _____

IV. MANDATORY FINDINGS OR SIGNIFICANCE (EIR required if answer to any of the following questions is "yes" or "maybe".)

<u>Yes</u>	<u>Maybe</u>	<u>No</u>
------------	--------------	-----------

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? _____ X _____

b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.) _____ X _____

c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.) _____ X _____

d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? _____ X _____

If any "yes" or "maybe" answers are marked, describe the specific nature of the environmental effects involved and their relationship to the project. (Use an attached sheet if necessary.) See staff report August 23, 1978

V. DETERMINATION:

On the basis of this initial evaluation:

I find the proposed project WILL NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared.

I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

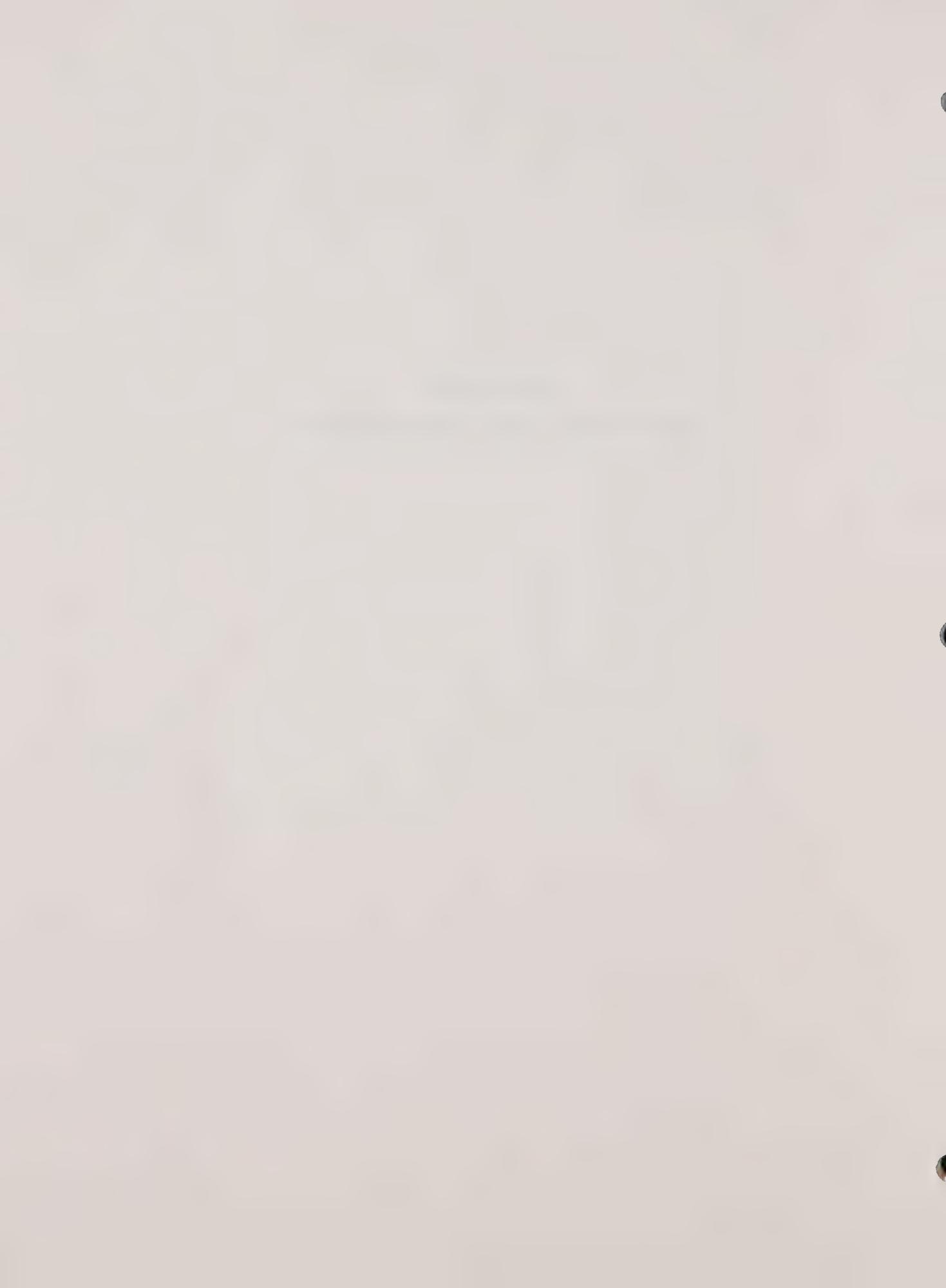
Name Carlos Amelin Date August 23, 1978

Title ASSOCIATE PLANNER



APPENDIX B

LETTER FROM DIABLO SOILS ENGINEERS



DIABLO SOIL ENGINEERS

File 2124
February 8, 1979

RECEIVED FEB - 9 1979

Miss Yane Nordhav
EIP
319-11th Street
San Francisco, California 94103

Re: Castle Drive EIR

Dear Miss Nordhav:

We are pleased to respond to your request for a comment about the stability of the proposed driveway parallel to Castle Drive, opposite upper Castle Park Way in Oakland. We conclude that a stable driveway can be installed in order to provide access to the series of lots that are too far away from the public street. The driveway will also preclude removing many of the tall eucalyptus trees adjacent to the street.

We drilled and tested the fill last year in order to evaluate its present stability and found that the fill is loose to firm with depth until native soil and bedrock was encountered (see our report of February 6, 1978 and the boring log for hole #1). The fill appears to have been excess material that was dumped over the edge of the road when Castle Park Way was developed a number of years ago, and it has naturally densified itself since then under its own weight.

Furthermore, the top of the fill, where the new driveway is to be installed, projects above the level of Castle Drive, and it will be lowered approximately three feet. The weight of the fill to be removed will be considerably more than the weight of new asphalt and transient live loads from passing vehicles, so settlement beneath the new road is unlikely.

When construction begins and the fill is lowered, engineers from our office and inspectors from City Hall will examine the remaining fill to determine if it is dense enough to support the roadway. If not, the fill will be lowered further until a firm base is found to allow refilling with compacted fill according to normal road-building practices.

Please write or call if there are comments or further questions.

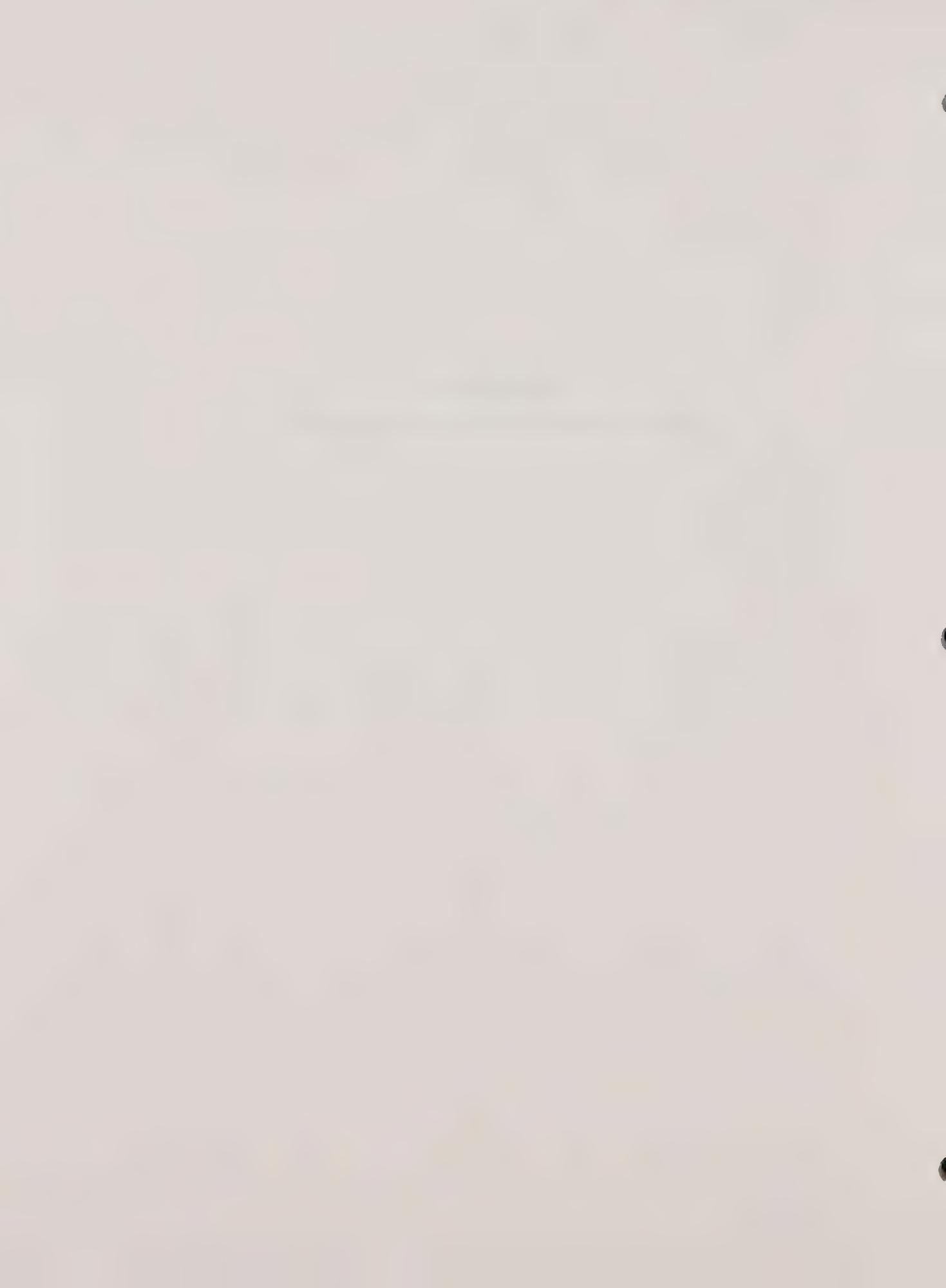
Very truly yours,

DIABLO SOIL ENGINEERS, INC.


Herbert R. Volin
Principal
cc: Sue

APPENDIX C

ROADSIDE TREE INVENTORY AND REPORT



ROADSIDE TREE INVENTORY AND REPORT
Castle Drive Subdivision, Oakland, California

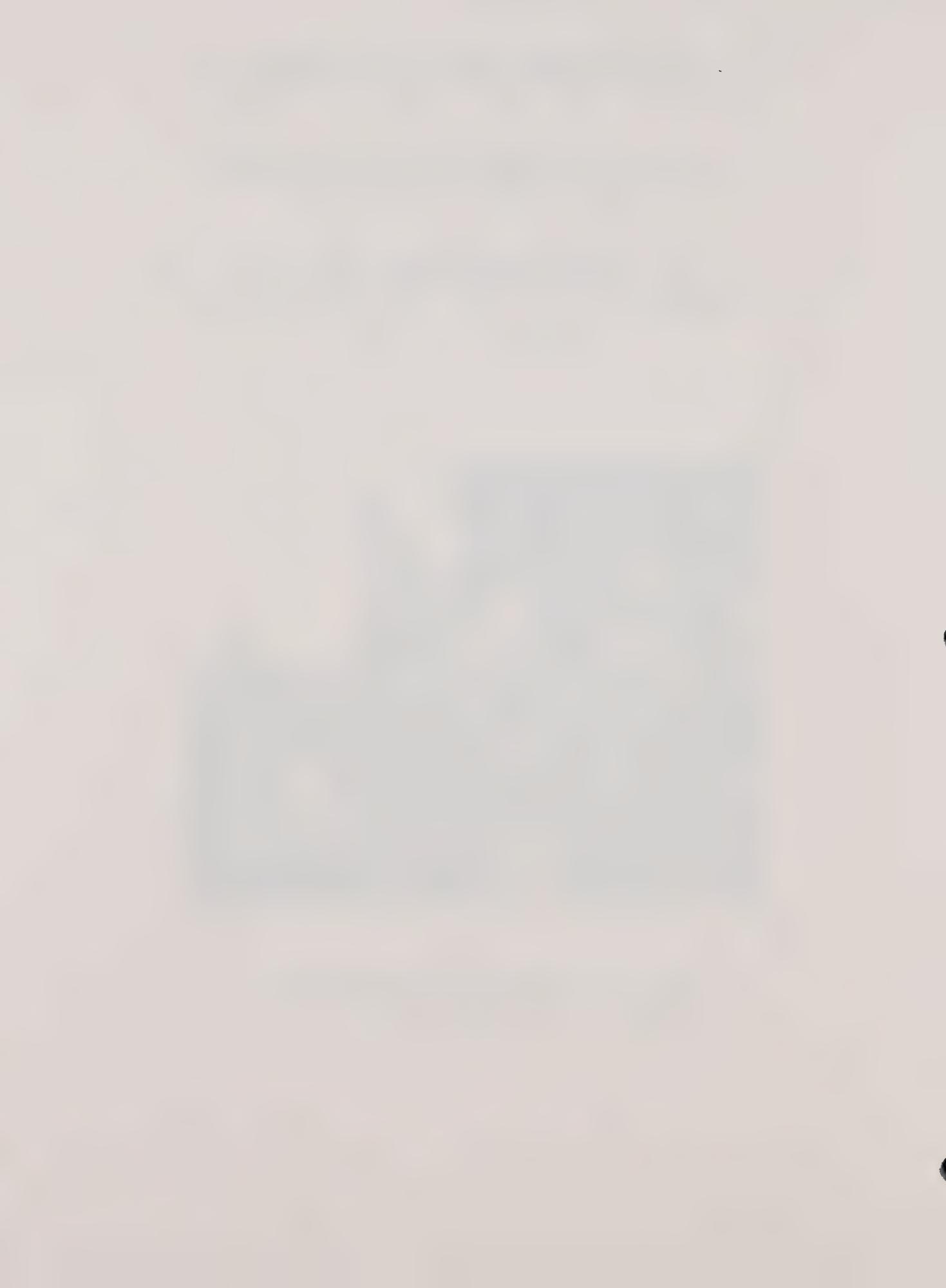
Prepared for
ENVIRONMENTAL IMPACT PLANNING CORPORATION
San Francisco, California

Subconsultant Service by
George Hood, Placerville, California
Arborist and Street Tree Selection Specialist

February 7 - 14, 1979



One of the few remaining building
sites in the Oakland Hills.



ROADSIDE TREE INVENTORY AND REPORT
Castle Drive Subdivision, Oakland, California

The Assignment - Scope of Services

As an independent subconsultant, inventory the roadside trees at the proposed subdivision site. In a report indicate whether or not hazardous conditions will result if these eucalyptus trees are trimmed or reduced in height. Assess the tree population of the interior areas of the proposed subdivision site. Can or cannot an acceptable line of sight distance be realized between the existing eucalyptus trees and the proposed locations for the driveways?



An example of the problem. New growth on trimmed eucalyptus trees is not strongly attached to the older tree trunk or limb.



ROADSIDE TREE INVENTORY AND REPORT
Castle Drive Subdivision, Oakland, California

Visual Report

Roadside eucalyptus tree No. 1. All of these 116 trees have been consecutively numbered. The numbers should remain visible for 30 days



Tree No. 59.
This tree has a
problem that it
cannot solve:
hazardous sucker
growth.



ROADSIDE TREE INVENTORY AND REPORT
Castle Drive Subdivision, Oakland, California

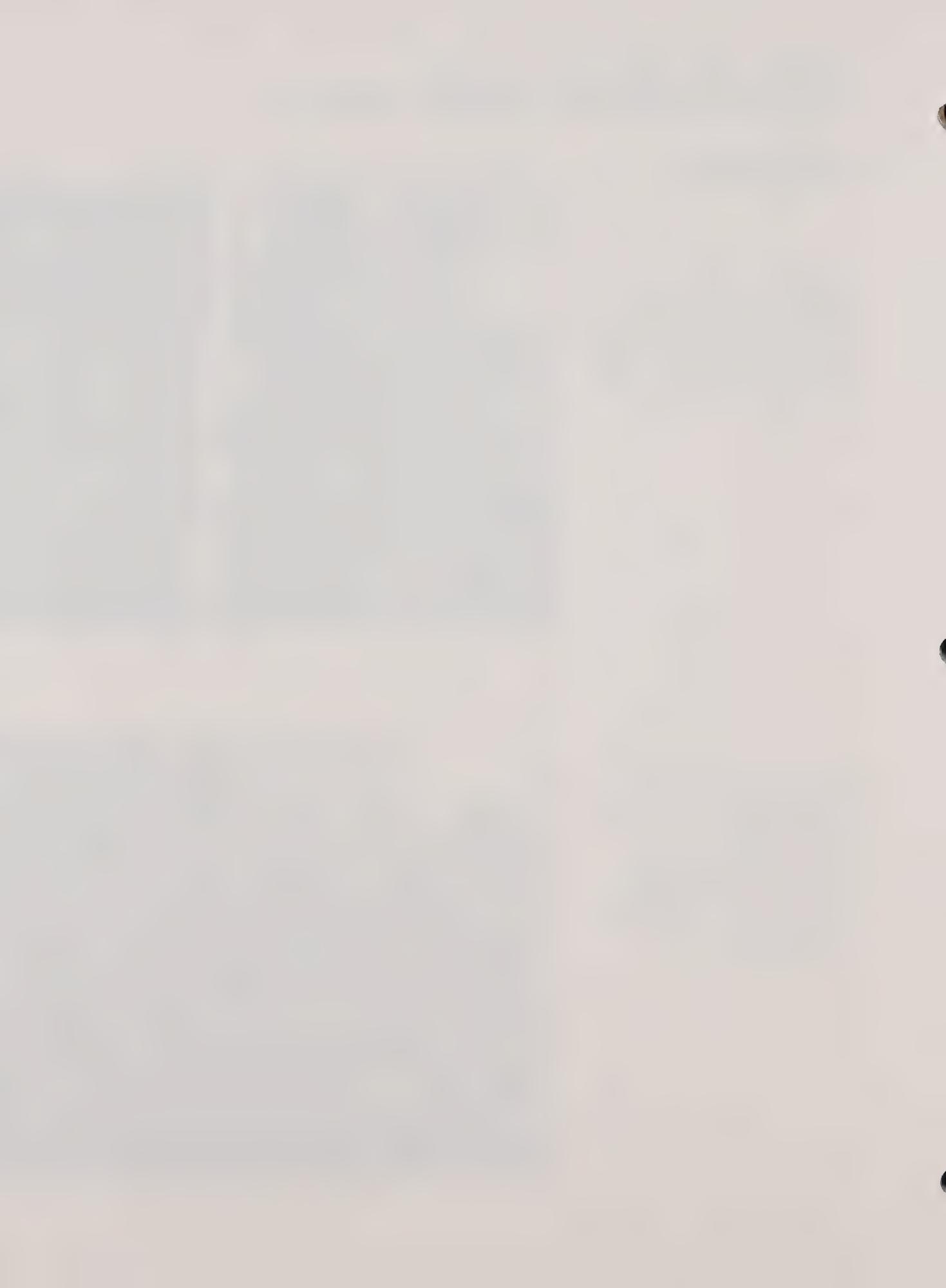
Visual Report

Ouch! I hurt!
I have been topped,
I have sucker growth
and I am located only
3 feet from the edge
of the pavement.



Roadside tree No.84
Sunset Magazine said
it nicely:
"Eucalyptus - the
tree that captured
California." Note
dead top of interior
area large, tall
euclayptus.





ROADSIDE TREE INVENTORY AND REPORT
Castle Drive Subdivision, Oakland, California

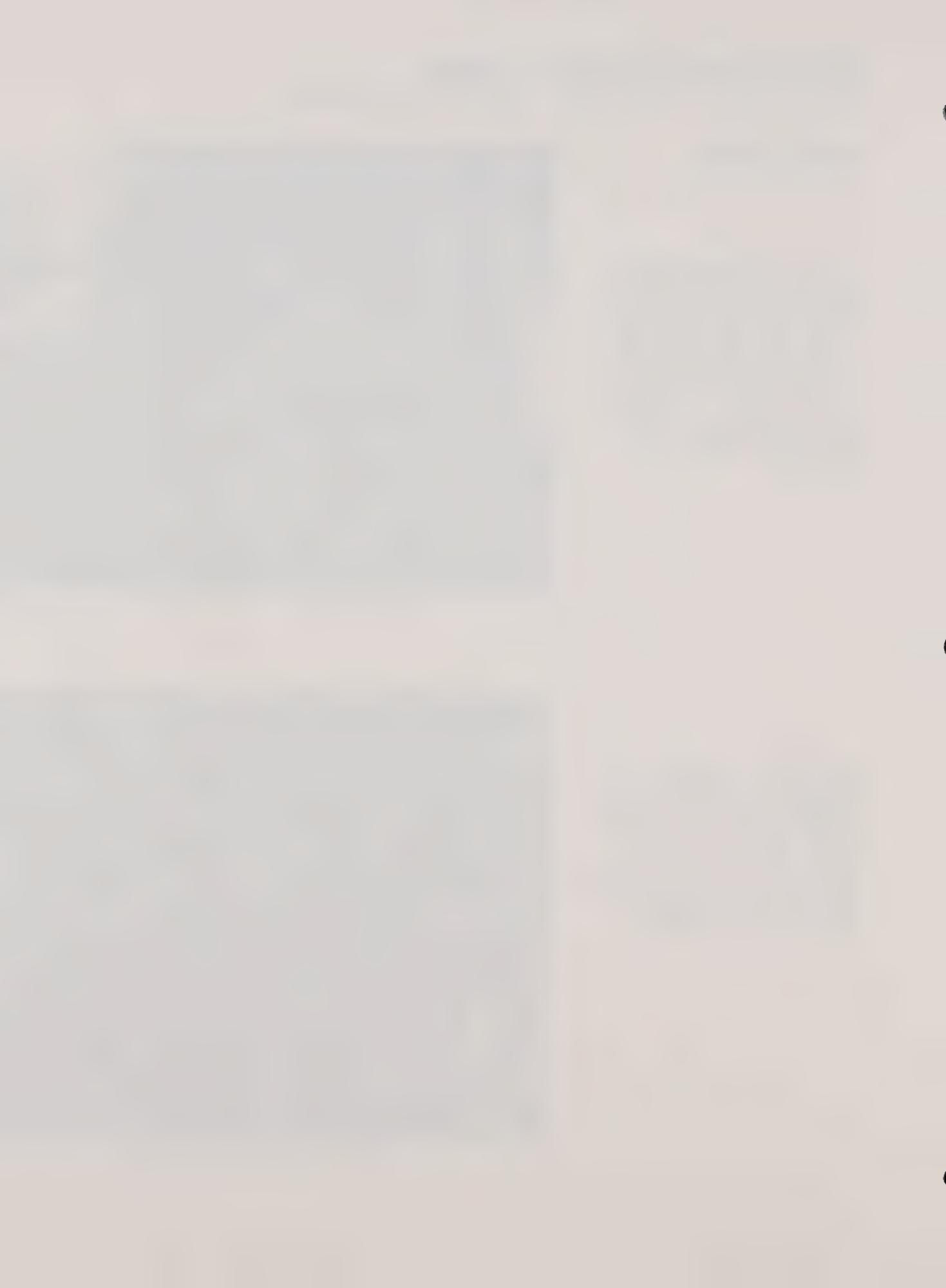
Visual Report

I am a great native California Bay tree. Location permitting, lets try to save me. I am located on the interior lot area. If you want to find me look to the right of eucalyptus tree No. 25.



Lets try to save me (too). I am *Quercus* *Gigrifolia* and would like to be a part of this proposed new subdivision. I think that I am located on private property.





ROADSIDE TREE INVENTORY AND REPORT
Castle Drive Subdivision, Oakland, California

Visual Report



Three topped roadside eucalyptus trees. One power pole complete with 12,000 volt primary lines and communication cables. Two cypress trees and one large very tall interior area eucalyptus tree.



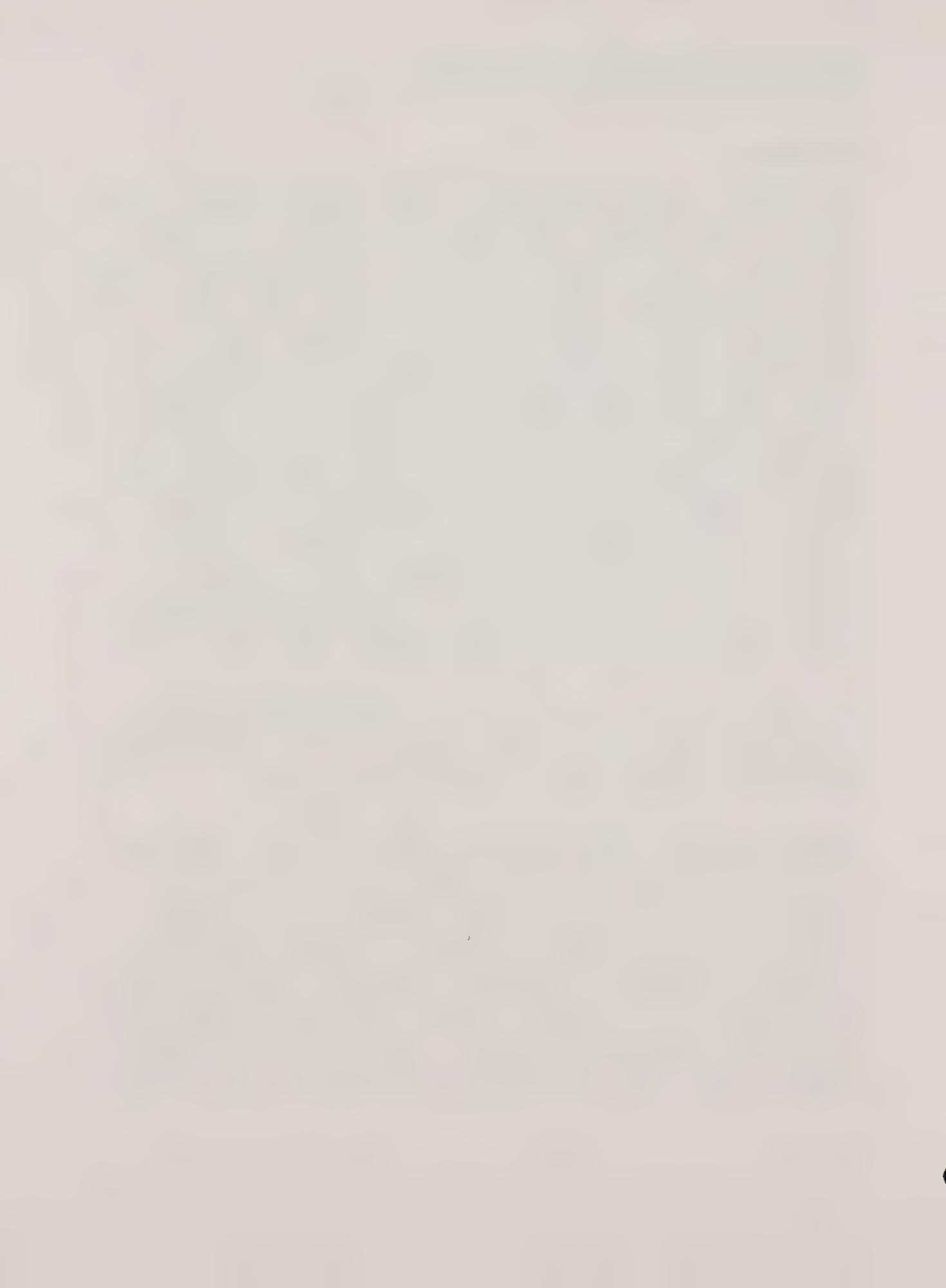
ROADSIDE TREE INVENTORY AND REPORT
Castle Drive Subdivision, Oakland, California

The Report

On February 7, 1979 the roadside trees at this location were inventoried. 18 potential home sites will have their frontages on Castle Drive, 9 potential home sites will have Cypressvale Lane frontages. There are roadside tree problems for the 18 lots that will have Castle Drive frontages. There are 116 large tall eucalyptus trees located very close to the edge of pavement at this Castle Drive location. There are hundreds of trees located within the property lines of 18 of the proposed lots. There are also many other "frontage" trees. The greatest tree or hazardous tree conditions center around these 116 eucalyptus trees. Most of the eucalyptus trees located in California do have built in potentially hazardous features. When eucalyptus trees are trimmed or have their height reduced, the resulting, fast growing new growth is not strongly attached to the parent trunk or limb. This new growth of limbs is often referred to as suckers, sucker growth, or water sprouts. This problem is much greater with eucalyptus than with other trees. In both winter and summer these sucker growth limbs can and do become detached and fall, many times from heights greater than 50 feet. It is not unusual for sucker growth limbs to attain lengths of 20 feet to 25 feet and diameters of up to 4 to 6 inches in only three years time.

The sucker growth that occurs at the base area of trimmed eucalyptus trees is sometimes more of a nuisance or maintenance problem than a hazard. This tree base area sucker growth does contribute to restricted line of sight distances when the trees are adjacent to streets or roads.

These eucalyptus trees have diameters of from 12 to 30 inches, heights range from 60 to over 100 feet. About one third of these trees have been topped, probably in 1973 after the severe freeze of November 1972. Many of the trees now already do have sucker growth or water sprout limb problems. If further trimming or height reduction occurs the problems will increase. The more trimming that is done the greater the problem. Many of these trees that are very close to the edge of the pavement show signs of having been hit by cars or trucks. A dead wood fungus is visible in five of these trees. This fungus grows only in dead wood and in itself may not shorten the life of eucalyptus trees. Some arborists do contend that the presence

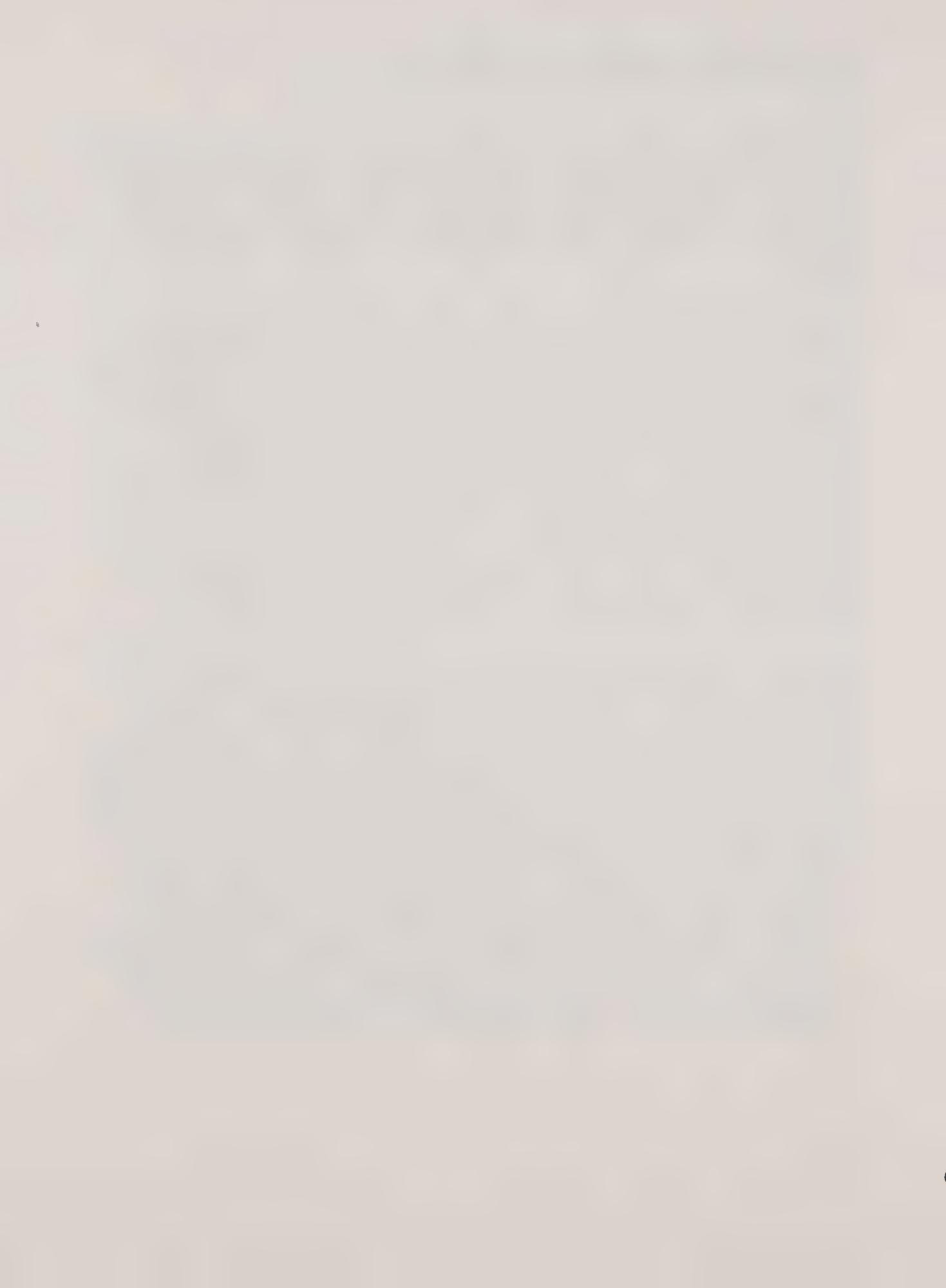


ROADSIDE TREE INVENTORY AND REPORT
Castle Drive Subdivision, Oakland, California

of dead wood fungus is the beginning of the end for eucalyptus trees. These particular eucalyptus trees, because they are growing close together, have formed only a few lateral crown branches. This condition compounds the trimming or height reduction efforts. The finest state-of-the-art drop crotch pruning is not possible on single stem (trunk) eucalyptus trees.

I have visually checked each of the 116 eucalyptus trees. I am sure that the removal of all of these 116 eucalyptus trees will best serve the interests of the City of Oakland, the land developers, the motoring public, and the future home owners. Today, to know that a hazard or potential hazardous condition exists is to invite legal encounters (problems?). If these 116 trees were to remain, there is no way that acceptable line of sight distances could be obtained between the trees and the proposed driveway locations. With 116 trees for 18 lot frontages, there could or would be 7 large tall eucalyptus trees per lot frontage. To minimize the erosion problem that could or would result from the removal of these 116 trees, the flush cutting, stump grinding process should be considered. Space for a pedestrian path would become available if these 116 trees are removed.

For the proposed lots 19 thru 27 there are no frontage tree problems. In fact there are very few trees on these 9 lots that have their frontage on the proposed Cypressvale Lane. For lots 1 thru 18 jungle tree conditions exist. Land clearing operations will be required for the home construction areas. For safety and poor location reasons the large tall interior lot area eucalyptus trees must also be removed. The tops of most of these interior area eucalyptus trees are dead, having been killed during the severe freeze of November 1972. Many of the interior area pine and cypress can and should remain. Initial tree surgery and proper tree maintenance will be required. The height of tall pine trees can be safely reduced without creating new hazardous conditions. Every effort should be made, locations permitting, to retain the native California Bay trees and the California live oaks. Even with all the suggested tree removals the remaining tree population will be greater than or compare favorably with the tree population of surrounding areas.



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This report submitted to the Environmental Impact Planning
Corporation, San Francisco, California, February 14, 1979.

George Hood
1988 Cold Springs Road
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Arborist and Street Tree
Selection Specialist
Member of the International
Society of Arboriculture,
Member of the California
Arborists Association
Fellow, Royal Horticultural
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APPENDIX D

LETTER FROM OAKLAND UNIFIED SCHOOL DISTRICT

RECEIVED MAR 16 1979

OAKLAND UNIFIED SCHOOL DISTRICT

900 HIGH STREET, OAKLAND, CALIFORNIA 94601
(415) ~~526-2622~~ 836-8366

Office of
Capital Planning

March 14, 1979

Miss Yena Nordhav
EIP Corporation
319 Eleventh Street
San Francisco, California 94103

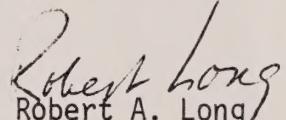
Dear Miss Nordhav:

This letter is forwarded to you pursuant to our discussion of March twelve and thirteen. As you are aware, the District was contacted earlier regarding any potential impacts that might be caused by the construction of twenty-nine new homes on Castle Drive near Mastlands.

The District has made a second review of the possible impacts which this project would have on the three schools serving the area: Joaquin Miller, Montera Jr. High and Skyline High School. Based on the most recent information available, it is necessary that our earlier statement be revised. It is District's staff opinion that the above mentioned schools will be able to absorb students generated by the site assuming an average of one child per household.

I hope this new information will be helpful in completing your report.

Yours very truly,


Robert A. Long
Coordinator
Capital Planning

RAL:mi
cc: Mr. Willie Yee, City Planning Department

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